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THE UNIVERSITY OF ALBERTA

BEHAVIORAL CORRELATES OF COACHING EFFECTIVENESS

by

ALEXANDER M. D. GORDON

©

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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DEDICATION

To my sister Margaret, brother-in-law Mike, nephews Andrew and James, and my niece Jenny, in Northern Ireland; and to Tina Gordon, my mother, in Scotland..... for all their love, support, encouragement and understanding 'across the miles'.

And to the memory of my father, Alistair Gordon, who taught us all by personal example the full meaning and significance of perseverence, and working hard at work worth doing.

ABSTRACT

Previous sport leadership research has related coaching success records (e.g. won-loss percentage data) to general leadership inventories which were typically designed to operationalize Behavioral and Situational Theories of Leadership. Coaching effectiveness therefore, was often considered a function of the relationship between *winning* and the presence or absence of *certain* leader behaviors or leadership styles. However, since both the utility and applicability of these approaches is both limited and naive, the present study neither assumes that success can be the *only* important indice of effective coaching, nor that behaviors and/or leadership styles more closely associated with business management, are characteristic of coaches working in athletics. Contrary to previous research therefore, coaching effectiveness in this study is reflected in levels of athlete satisfaction with performance factors (including won-loss data), satisfaction with the coach, and specific athlete role dimensions. Also, coaching behavior and decision-making styles are assessed by administering inventories that are designed specifically for the study of leadership in sport.

The purposes of the study were two-fold. First, to examine the differences between coach and athlete preferences in regard to coaching behavior and decision-making styles; and second, to investigate the significance of these differences when related to athlete perceptions of coaching effectiveness. An assumption, taken from earlier studies examining congruency measures in leadership (e.g. Chelladurai, 1978; Yukl, 1971), was that higher congruence scores (least discrepancy) between coach and athlete preferences for both coaching behavior and decision-making styles, would be positively related to athlete ratings of coaching effectiveness.

Three forms of the Leadership Scale for Sport (LSS, Chelladurai, 1978) and a Decision-Making Style Inventory (DSI) were administered to the study sample comprised of eighteen head coaches and one hundred and sixty-one 'starting' players on male soccer teams who competed in the 1982-83 CIAU season. The LSS and DSI operationalize the Multidimensional Model of Leadership (Chelladurai, 1978) and Normative Model for Decision-Making in Coaching (Chelladurai and Haggerty, 1978) respectively. Players also

completed a Personal Opinion Inventory (POI) which measured levels of athlete satisfaction with seven dimensions of their involvement with their team and their coach. Descriptive and inferential statistical analyses were facilitated through SPSS and MIDAS computer programs.

The validity and reliability of the POI instrument, which measured coaching effectiveness, remains uncertain, however a close inter-relationship was found between all seven athlete satisfaction measures. Actual team success (i.e. won-loss data) was significantly related to satisfaction measures of performance, however *good* results did not influence athlete perceptions (levels) of satisfaction with coaching expertise, role clarity, role acceptance and team involvement. ***Successful coaching*** therefore, was perceived by athletes to be significantly different from ***effective coaching***.

Very little support was found for Chelladurai and Haggerty's (1978) Normative Model for Decision Making in Coaching as neither coaches nor athletes expressed much liking for delegative decision styles. While athletes indicated more preference for consultative decision styles of coaches, it was apparent that they generally expected and preferred coaches (rather than players) to be responsible for decision-making.

While both coaches and athletes preferred Training and Rewarding behavior 'often', Democratic behavior and Social Support 'occasionally', and Autocratic behavior 'seldom', coaches reported using significantly more Training and Rewarding behavior than other coaching behavior. Autocratic behavior, which was perceived positively and negatively by coaches and athletes respectively, was liked least by athletes but, along with Training behavior, Rewarding behavior and especially Social Support, was significantly related to actual success. Overall coaching effectiveness (athlete satisfaction) therefore, was significantly related to coaches who exhibited Training behavior, Democratic behavior, Rewarding behavior and especially Social Support.

Congruent data consisted of coach and athlete discrepancy scores on both decision styles and coaching behavior. These dyad scores were significantly related to athlete perceptions of coaching effectiveness. The discrepancy however, between what athletes 'see' (perceive) and

what they 'want' (prefer) was regarded as the most potent and reliable congruency measure, particularly in regard to Training behavior which was significantly related to all dimensions of athlete satisfaction (coaching effectiveness).

While players on less successful teams perceived significantly more Autocratic behavior than those on successful teams, the latter preferred and perceived significantly more Social Support and Training behavior respectively, and were significantly more satisfied with team performance and coaching expertise. *Actual success* therefore, was related to a coaching personality that is characteristic of a 'benevolent autocrat' - or, more specifically, a coach who exhibits technical competence (Training behavior), direct coaching methods (Autocratic behavior), supportive and friendly interpersonal relationships (Social Support) and positive feedback (Rewarding behavior).

While both of the theoretical models used in the study, and their assumptions, are a significant improvement on methodologies found in previous sport leadership research, the limitations inherent in self-report measures still seriously inhibit and restrict any progress made towards a general theory of sport leadership. Such a theory, that explains more clearly 'what good coaches do', still wants for both valid and reliable instrumentation that can measure behavior and coaching effectiveness contextually, and also sport inclusive data that accounts for both macro and micro variables that influence the dynamic leadership process. Accurate and credible data collection therefore, in any sport situation, will require additional field research techniques to augment self-report measures, notably audio-visual taping, observational systems, interviews, in combination with, descriptive anthropology (ethnography).

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I feel it is entirely appropriate in a 'leadership study' such as this, that I first acknowledge the example, influence, and personal leadership of the following individuals. In their own unique way and for different reasons known only to myself, they have positively affected my personal development as a sportsman and as a discerning student. I feel very fortunate to have known these people.

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Chapter I

STATEMENT OF THE PROBLEM

A. INTRODUCTION

The majority of sport research that previously focussed on coaching effectiveness relied heavily on leadership literature and, in particular, the literature on leadership effectiveness for its study base. Tangible links and similarities do exist between coaching and other leadership roles, and some theories of leadership have helped sport researchers examine and explain various aspects of the coach's role. However, the popular and current application of general leadership research techniques to studies of coaching effectiveness, has a number of serious shortcomings three of which are outlined below.

First, since the medium of athletics and coaching has rarely been given sufficient longitudinal attention, researchers in this field have not been able to generate a sport specific 'theory of coaching'. Consequently sport researchers have applied or tried to adapt and translate general theories of leadership in sporting terms, with often confusing results. Such approaches have merely supported or questioned the applicability and utility of using certain theories of leadership in sport with little or no attempt to advance even the notion of a theory of sport leadership. The sole exception to this has been the work completed by Chelladurai (1978) and Chelladurai and Saleh (1980) on, respectively, the Multidimensional Model of Leadership and the Leadership Scale for Sport (LSS). While the work of these authors falls short of generating a theory of sport leadership, their theoretical concepts are drawn from suggestions or modifications to leadership theories by sport researchers and are formulated uniquely from a data base in athletics. Since their work focuses directly on the sport coach, their research, and most specifically the LSS, is featured prominently in this study of soccer coaches.

A second problem concerning the use of general leadership theories in coaching effectiveness research rests with inadequate or incomplete measures of the leadership process.

Because most general theories do not accommodate all the important dimensions affecting a coach's leadership, inadequate coverage of the processes involved must severely question the subsequent substantiveness of research findings. For example, theories that consider characteristics of only leaders and favourable situations (e.g. Fiedler's Contingency Model, 1967) or only subordinates (e.g. House's Path-Goal Theory, 1971) or both leaders and subordinates but not situational factors (e.g. Graen and Cashman's Role- Making Theory, 1975) cannot adequately account for the important interaction of those three factors in the medium of sport and coaching. An attempt has been made to make this study more comprehensive than previous research by considering the effect of situational influences on the behavior of both coaches and athletes, and by relating coaching effectiveness to both coaching behavior perceived by coaches and athletes *and* the situation or context in which this behavior manifests itself. Unlike the LSS, Chelladurai and Haggerty's (1978) Normative Model of Decision Making in Coaching acknowledges the effects of situational factors on the decision styles of coaches. This model, and specifically its assumptions about optimum decision-making styles for different coaching situations or contexts, is also heavily utilized in this study.

A third weakness associated with previous research approaches to coaching effectiveness concerns operationalizing a credible definition of effective coaching. While it may readily be accepted that *successful* coaching is quantifiable and easily measured, e.g. in terms of won-loss percentage data over a season or a coach's entire career, *effective* coaching is not objectively determined so easily, nor can it be easily measured.

The coach is undeniably instrumental in producing successful behavior and polished performances but his or her effectiveness in producing, for example, rewarding motivational states in athletes is also important and perhaps more important than successful won-loss records at certain levels of competition. Consistent with this perspective and in examining components of coaching effectiveness, this study utilized a number of distinct indicators of subjective assessments of athlete satisfaction with the coach, performance aspects, and athlete role dimensions.

In summary, the purpose of the present study was to determine conceptual linkages between coaching behavior (which includes decision-making styles) and coaching effectiveness. An underlying assumption of the study was that congruence measures between coach and athlete preferences for both coaching behavior and decision-making styles would be related to coaching effectiveness. That is, higher congruence scores would facilitate and enhance athlete satisfaction (Chelladurai, 1978).

B. JUSTIFICATION OF THE STUDY

In the wake of soccer's popularity amongst a growing number of amateur players across North America, the development of coaching programs in both the U.S.A. and Canada has assumed greater significance and importance. However, while technical and theoretical information on sport coaching is made available by most National Sport Governing Bodies, the impact and significance of different coaching behaviors and decision styles has been ignored or overlooked completely. For example, neither the American Coaching Effectiveness Program (ACEP) nor the Canadian National Coaching Certification Program (NCCP) refers to coaching behavior in their theory levels. Nor is there any reference made to coaching behavior in either the United States Soccer Federation (USSF) or Canadian Soccer Association (CSA) technical courses. Furthermore, texts that might be expected to make specific or general reference to the effects of coaching behavior or decision-making, have avoided this area altogether (e.g. Singer, 1972; Taylor, 1975; Massengale, 1975; Sabock, 1979; Martens et al, 1981; Llewellyn and Blucker, 1982; Legget, 1983). In fact the relationship between coaching behavior, including decision-making styles, and coaching effectiveness has never been adequately investigated or examined.

This study might contribute significantly to this research area as it highlights both coaching behavior and decision-making styles as important components of general coaching when related to measures of coaching effectiveness. The research results and conclusions are subsequently discussed in terms of their important implications for existing technical and

theoretical coaching preparation programs.

Another important feature of this study is the methodology adopted for data collection. Coaches and their athletes were asked to report on coaching behavior, decision-making styles and coaching effectiveness, and it is the interaction or transactional nature of this data that is considered to be most significant in researching the study problem.

Finally, the study is significant because it combines the use of the Leadership Scale for Sport (LSS) and the Normative Model for Decision-Making in Coaching, for the first time. While each was developed for investigating the leadership behavior and decision-making styles of coaches (respectively) their previous use was in separate and unconnected studies. The decision styles inventory used in this study to examine both decision-making styles and the utility of the Normative Model's prescriptions in a sport specific context has not in fact been tested empirically before.

C. PURPOSE OF THE STUDY

The primary purpose of the study is to investigate the relationship between two sets of congruence scores concerning coaching behavior and decision-making styles and athlete measures of coaching effectiveness. An attempt will be made in this study to discriminate from congruence score data those aspects of coaching behavior and decision-making styles that can best predict athlete perceptions of coaching effectiveness. An assumption based upon previous research is that congruent coach and athlete scores for both coaching behavior and decision-making styles will be reflected in higher athlete ratings of coaching effectiveness.

To effect the above, coaches and their own athletes will be asked to indicate their preferences for both coaching behavior, using the Leadership Scale for Sport (LSS), and decision-making styles, using a Decision Styles Inventory (DSI). Both sets of coach and athlete responses will be compared and then converted to congruence scores which will subsequently be related to athlete perceptions of coaching effectiveness. Coaching effectiveness measures in the study are drawn from a Personal Opinion Inventory (POI) which lists questions on seven

different aspects of athlete satisfaction in a sport.

A second purpose of the study is to empirically test Chelladurai and Haggerty's (1978) Normative Model of Decision Styles in Coaching in a sport specific context. To date this theoretical model has only been used as a basis for making predictions about what coaches would 'normally' do in certain coaching situations (Chelladurai and Haggerty, 1978). This investigation will provide empirical data pertaining to the utility of the model's prescriptions for decision-making in sport,and will also provide an opportunity to examine the decision styles of coaches separate from other coaching behavior.

D. DEFINITION OF TERMS

ATHLETES - All starting players on male teams participating in the 1982-83 Canadian Intercollegiate Athletic Union (CIAU) soccer season.

BEHAVIOR - Head coach behavior is grouped under the five categories of behavior represented in the forty-item Leadership Scale for Sport (LSS). The five behavior categories are defined as follows:

1. Training and Instruction Behavior(13 items) - behavior aimed at improving the performance of athletes by emphasizing and facilitating hard and strenuous training, and by clarifying relationships amongst team members through structuring and coordinating team activities.
2. Democratic Behavior(9 items) - behavior of the coach that allows greater participation by athletes in decisions relating to the establishment of, for example, group goals, practise methods, game tactics and team strategies.
3. Autocratic Behavior(5 items) - behavior of coaches which sets them apart from athletes and maintains the control over all the decision-making pertaining to team affairs.
4. Social Support Behavior(8 items) - behavior of coaches that indicates a genuine concern for all athletes and their welfare. Also, behavior that fosters a positive group atmosphere and warm interpersonal relations between team members.

5. Rewarding behavior(5 items) - coaching behavior that provides positive and rewarding reinforcements for athletes through recognition of good performances (Chelladurai, 1978).

Perceived Behavior - Athlete perceptions of their coach's behavior as indicated using the LSS

Preferred Behavior - Athlete preferences for coaching behavior reported in the LSS.

Coach Intended Behavior - Coach responses to the LSS indicating degrees of behavior coaches use or would (intend to) use in coaching.

COACH - All head coaches of male teams involved in the CIAU 1982-83 soccer season. Coaches and their athletes from each team respond. (Both coach and athlete data are required for statistical procedures involving congruence scores. If either data set is missing the team is excluded from congruency analysis).

COACHING EFFECTIVENESS - Seven dimensions of athlete satisfaction are the study's measures of coaching effectiveness. The data, taken from the player's Personal Opinion Inventory (POI), will represent degrees of athlete satisfaction with the following:

1. Personal Performance - how satisfied athletes were with their personal performance in the 1982-83 season.
2. Team Performance - how satisfied athletes were with the team's overall performance in the 1982-83 season.
3. Coach Expertise - satisfaction with their coach's technical and tactical knowledge of the game, and skill instruction.
4. Coach Social Skills - satisfaction with the coach's interpersonal skills at both an individual and team level.
5. Role Clarity - satisfaction with the coach's ability to clarify for athletes their duties and responsibilities on and off the field.
6. Role Acceptance - satisfaction or degree of acceptance the athlete had in regard to the role

given to him by the coach.

7. Team Involvement - satisfaction with the degree of participation and input the athlete had in the operation of the team as a whole.

DECISION-MAKING STYLES - Four different decision-making styles are used in this study each representing four different strategies coaches might use in coaching situations. The four styles are defined as follows:

Autocratic Style - decisions made entirely by the coach alone without consultation with anyone else.

Consultative Style - decisions ultimately made by the coach but after consulting with one or more of the *athletes* on the team. (Consultation with assistant coaches is not included in this or any decision style).

Participative Style - decisions made by the group including the coach whose position here is that of another team member.

Delegative Style - decisions made by a team member or group of athletes who have been delegated by the coach to be responsible for that decision on behalf of the whole team.

DECISION-MAKING STYLE RESPONSES - Using the Decision Styles Inventory (DSI) four different response perspectives on decision-making styles are possible - two each from coaches and athletes. These perspectives based on the same fifteen soccer situations in the DSI are:

Coach Intended - the decision styles that coaches reported they would use or intended to use in each of the fifteen cases described in the DSI.

Coach Normal - the decision styles coaches felt other coaches in CIAU soccer would normally use.

Athlete Perceived - the decision styles that athletes perceived their coach using or felt the coach would use in the fifteen cases.

Athlete Preferred - the decision styles athletes would prefer their coach to use.

WON-LOSS RECORD - As an objective measure of each coach's success record over the 1982-83 season the number of points his team won in CIAU league competition is expressed as a percentage of the total points possible. Teams can subsequently be grouped according to won-loss percentages for statistical purposes and comparisons e.g. successful teams versus less successful teams (intermediate success) versus poor teams (least success).

E. LIMITATIONS

1. All fifteen cases comprising the Decision Styles Inventory were scrutinized thoroughly first by the researcher and two CSA Technical Directors and finally by other experienced soccer coaches. Undergraduate students who participated in three pilot studies also critically examined the prescriptions and procedural rules of the inventory and the particular cases. However, regardless of the face validity of each of the fifteen Decision Style Inventory cases their hypothetical nature might distort both coach and athlete perceptions of the soccer situations. Innaccurate and inconsistent perceptions of the coaching contexts might therefore jeopardise the validity and reliability of the data.

2. Due to distance, time, and financial constraints it was not possible for the researcher to personally supervise and monitor response sessions with each team. Consequently the inability to standardize administration procedures and explain fully to each team the purposes of the study might have affected the quality and authenticity of the responses.

3. Coaching effectiveness or how well a coach can do his job to the satisfaction of his athletes has, in itself, limited effect on units of performance. Perhaps other important components of coaching which were not considered in this study e.g. recruiting practises, quality of facilities and organizational acumen, could also have been included as measures of coaching effectiveness. Similarly, different program budgets and the presence and/or absence of soccer scholarships cannot be overlooked. These are additional objective factors that may affect

the operation of all CIAU soccer teams, and so they too can inhibit or enhance a coach's effectiveness.

Chapter II

LITERATURE REVIEW

A. DECISION-MAKING - AN INTRODUCTION

> I am at war twixt will and will not.
> Shakespeare.

Making decisions is an everyday activity we all engage in which may not of course always involve the dilemma inferred above. Decision-making, however, can be troublesome particularly to those individuals in positions of leadership and influence in the 'people business'.

Decision-making is also one of the constant recurring demands of coaches working at all levels of competition. Frequent problems arise in sport that require decisions to be made regarding such matters as seasonal planning, conducting practise sessions, and supervision of actual competitive performances. Such decisions to a greater or lesser degree, are the responsibility of the coach. The categories or types of decisions that confront the coach can vary widely depending upon the coaching context and situation (Cratty, 1970), and decision-making behavior may be placed on a time continuum with off-season circumstances at one end, and during or in-season circumstances at the other. Similarly, various levels of decisions can also be arranged into categories. One category might concern the physiology of conditioning, intensity of workouts, etc.; a second, the interpersonal relationships amongst team members and coaches; and a third, might involve judgment of team strategy or tactics and personnel selections. Whatever the circumstances, it is readily accepted that all such decisions that are made pertain in some way or another to the coach, because decision-making is inextricably part of the coach's role.

Beginning with types of decisions, decision-making conditions, and different considerations for decision makers, the following section reviews the nature of personal and situational variables affecting the decision-making process. Although originating almost exclusively from research in organizational psychology and management science, the influence of the following factors has clear relevance to decisions made in sporting contexts. In particular, the review has important implications for the decision-making practises of coaches.

B. DECISION-MAKING TYPES, CONDITIONS AND TECHNIQUES

The popular mental image of decision-making is usually that of someone announcing 'yay' or 'nay' or stamping approval on the dotted line of a document. However this image totally falsifies the situation because it focuses only on the final moment or the final choice. It ignores the whole lengthy and complex process of 'alerting', 'explaining' and 'analysing' that precedes that final and ultimate moment. Decision-making therefore, must first be regarded as a process and not simply a matter of choice. Second, while choice refers to a final pick from among alternatives, a decision refers to those activities that contribute to choice, including recognizing, delimiting and evaluating alternatives, as well as the final selection. Third, the decision-making unit can refer to a single person but it can also refer to two individuals or a group of people designated to make decisions (Thompson and Tuden, 1980).

In regard to different types of decisions, two extreme types have been identified as 'routine' and 'unique' (Donnelly, Gibson and Ivancevich, 1978) or 'programmed' and 'unprogrammed' (Simon, 1980). Routine decisions are also often described as programmed in the sense that they are made in response to problems or situations that occur with some regularity. They tend to be commonplace and are sometimes obvious because they are based on policy, principle or established rules and procedures. Unique or unprogrammed decisions on the otherhand, are made in response to novel situations for which no procedure has been established. Unprogrammed and unstructured they are frequently complex for decision-making units to deal with both in terms of resource and time utilization. While routine decisions may

outwiegh unique decisions in terms of frequency with which they are made, the total time allotted to both extremes of decisions is probably near equal because unique decisions demand more time. An example from the coaching world might be the time and thought spent in deciding between travel itineraries within a well established or routine conference schedule, and priorizing in advance, some budgetary consideration uniquely restrained by sudden cut backs on an athletic program.

As well as the implied differences in the resolution, techniques, and processes of different types of decisions, at least three decision sets or decision conditions have also been identified. These have been described as conditions of certainty, risk, and uncertainty (Connor, 1980). Under conditions of certainty all the alternatives and their outcomes are perfectly known or so it is assumed. In this imperfect world however, whether in business or sport, virtually every situation including even the most extreme circumstance will have at least some degree of uncertainty. Second, under conditions of risk most decision makers, at whatever level, will tend to make the same decision over and over. Basically their behavior is predictable because they repeat themselves. For example, if a given decision alternative is frequently best for a particular situation and if that situation occurs frequently then that given alternative will be selected on a frequent basis. Finally, in decision-making under conditions of uncertainty the decision-making unit knows nothing. The total set of alternatives is only incompletely understood and the various outcomes that may or may not occur are unclear and even their probabilities are not known. While uncertainty, according to Connor (1980), is the condition that characterizes virtually all business organizational design this may not be the case in the sporting world. However, perhaps sport and particularly coaching, is characterized more by all three conditions, compelling coaches to continually re-adjust their decision-making strategies.

Different considerations can also bedevil the decision-making process. For example, two important considerations for the decision-making unit are timing - knowing when to make a decision; and analysis - figuring how much information is required for a decision to be made. (Allbrecht, 1980; Horton, 1983a,b). Knowing when to make decisions is an awareness skill that

is developed with more or less success, and while some individuals are too hasty or impulsive, others are too deliberate or too slow. When a decision is made too hastily it is very likely that not all the alternatives would have been considered. On the otherhand waiting too long or waiting perhaps for the single perfect alternative may be equally undesirable because procrastination often results in the automatic elimination of other alternatives, i.e. by the time a decision is reached there are no other alternative choices left to choose from! Individuals therefore need to be aware and sensitive to their own tendencies and perhaps idiosyncracies when involved in decision-making to ensure that they have a good objective understanding and appraisal of the situation. Analysis refers to the amount of time, energy, and thought given to decision-making. Allbrecht (1980) identified extremes of analysis with impulsively-made snap decisions at one end of a continuum and decisions that suffer from paralysis-by-analysis at the other. In the latter case every last detail is analysed to such an extent that excessive amounts of fact and detail often obscure the alternatives and their relevancy to the initial problem. Executives and coaches must therefore be able to determine the optimum degrees of analysis essential for each decision which requires complete familiarity with each situation and of course a realistic assessment of its relative importance.

Some further aspects of decision-making that require consideration have been identified by Arnold (1978). For example, are decisions planned or are they accidental?; and second, is the basis for the ultimate decision emotional or rational? Planned and accidental decisions, according to Arnold, differ in the amount of time and analysis used in the decision-making process. Accidental decisions occur when the employment of timing and analysis is described as either too much or too little. Recourse to time and analysis in planned decisions on the otherhand would be described as optimal. In regard to the second consideration individuals must realize whether their ultimate decisions are primarily based on 'gut level' or emotional feelings or on rational or factual reasons. Arnold believed that:

> The most durable decisions are those that reflect both reason and emotion. It is

striking the right balance that is crucial. (Arnold, 1978, 14)

Rowe (1974) has also alluded to the importance of balance between emotionality and rationality in decision-making but with particular reference to improving the decision quality.

> .....by understanding the influence of personal preference in decision-making the (executive) decision-maker can in fact do two things. He can improve the quality and rationality of his own decisions ....and predict, and to some extent shape the decisions of his subordinates. (Rowe, 1974, 40).

Extending the debate on the nature of emotionality and rationality in decision-making, Simon (1976) addresses the issue as an individual cognitive process and questions whether rational decisions can ever be assumed to be necessarily superior or necessarily always correct. Objective rationality first of all is when a decision-maker assesses all potential alternatives comprehensively, considers all complexities of outcomes from each choice or combination of choices and, using clear and consistent criteria, singles out the one alternative that best solves the problem. Simon however, points out that a decision-maker's behavior falls short of objective rationality in at least three ways. First, rationality requires a complete knowledge and anticipation of the consequences that will follow each choice when in fact knowledge of consequences is always fragmentary and incomplete. Second, since consequences lie in the future, imagination must inevitably supply the lack of experience in attaching some value to those consequences. Third, absolute rationality requires a choice from among all possible alternative behaviors when, even where the decision unit is a group of individuals, only a few of all possible alternatives actually come to mind. In short, rationality is neither objective nor complete. It is subjective and limited to the extent that real rationality is what Simon calls 'bounded', i.e. bounded by the subjective faculties and incomplete knowledge of the decision-maker. Simon's suggestion for decision-makers therefore, is to choose a course of action that is the best or most satisfactory choice and that is simply good enough. This is called

'satisficing' and simply involves choosing a solution that best fits the situation for the information currently available. Both 'bounded rationality' and 'satisficing' therefore are present in decision-making whether viewed as an individual cognitive process or as an administrative and/or coaching organizational function.

The evidence so far, indicates that decision-making involves a process. It is not a solitary event. However, while consideration of both the types of decisions and the current conditions affecting the ultimate choice and the decision-making unit have been outlined, the question still to be addressed is how do decision-making units decide? This refers to decision-making *techniques* (as distinct from decision-making *styles*) and three techniques that coaches can use when deciding how to decide, have been identified by Fuoss and Troppman (1981).

The first basis or criterion for any decision, may be a coach's feeling or hunch. These so called intuitive decisions are likely to predominate when a coach has little or no knowledge of the factors underlying a problem or when he or she is unfamiliar with workable solutions. A second technique that may often be used is based on the criterion of experience and such 'judgment' decisions do actually dominate and tend to consume most of the typical coach's time. Decisions based on experience in sport and elsewhere have been criticised as forms of prejudice (e.g. Selye, 1974) but this has certainly not deterred coaches. It is almost customary for coaches in some circumstances to only use common sense rules of thumb that have been learned through experience to guide their decisions even though prior knowledge of all factors involved may be incomplete. The third and final identifiable basis or method for decisions may be through careful analysis of available alternatives followed by a decision which is optimally pragmatic. This problem-solving approach recognizes that decision-making is not a discrete event but rather a process that requires (demands) different skills of coaches than those employed when making intuitive or judgmental decisions. Cognitive or mental skills that enable the coach to think clearly are required for conceptualizing, problem solving, determining goals and objectives, analyzing and interpreting. The acquisition of such skills may often delineate

and discriminate effective and/or successful coaches from non-effective and/or unsuccessful ones. Fuoss and Troppman (1981) point out that it would be a mistake and even unfair to immediately dispel the utility of the former two techniques in favour of the problem-solving approach. Intuitive decision-making may undoubtedly be unacceptable as a long-term strategy but coaches still use this technique with different degrees of success in certain novel or atypical situations. Similarly, decisions based on judgment are often used exclusively by some coaches in certain sports and to good effect. Consequently, for many coaches and coaching researchers in particular, effective decision-making may still be attributable to either of these two techniques or, perhaps even more likely, to a combination of both intuition and experience.

C. EFFECTS OF STYLE, POWER AND ENVIRONMENTS

Decision styles of managers, leaders or coaches are merely learned ways of processing information and making decisions (Hunsaker and Alessandra, 1980). Value judgments, reflecting an individual decision-maker's moral development, and socialization factors, must of course be acknowledged as important influences in the decision-making process. However, for the purposes of this review, a decision-making style can be regarded only as a habit acquired through past experiences similar to our characteristic ways of learning from and relating to others. Some notable typologies of decision-making styles from the literature include those described in the following:

Lewin (1947) -autocratic, democratic and laissez-faire styles.
Likert (1967) - authoritative (exploitive as well as benevolent), consultive, and participative decisions.
Maier (1974) - autocratic, consultive, management and group discussion.
Bass and Valenzie (1974) - directive, manipulative, consultive, delegated and participative decisions.
Hunsaker and Alessandra (1980) - decisive, hierarchic, integrative and flexible styles.

The effects of different styles of leadership on decision-making have been referred to in numerous leadership texts in business (e.g. Gibb, 1969; Fiedler, 1967): Parker (1977)

summarized two basic types of leadershipstyles which are commonly set at polar extremes on a continuum as the instrumental, task-oriented or autocratic style and the socio-emotional, interpersonally oriented or democratic style. Parker also referred to 'ideal leader style' and maintained that to create a working condition in which decisions are successfully and effectively implemented, the ideal leader must exhibit active interest and consideration for others, and have democratic persuasive skills.

Maier and Hayes (in Vroom and Deci, 1970) also used the autocratic-democratic polar extremes to explain the ideal atmosphere for nurturing creative work. They pointed out that the democratic style is not only more likely to accommodate creative work, it also assumes that mature, intelligent and educated adults are capable of managing their own affairs in responsible ways. It is apparent that people react positively to opportunities for expressing natural human attributes and negatively to deprivation of such opportunities. Maier and Hayes point out however, that the most distinctive yet often overlooked feature of democratic decision-making is in having 'one's say' not in having 'one's way'. Having 'one's way' would be unrealistic if not impossible in any system of organized activity regardless of the needs of some individuals to assert control in certain situations and this would appear to be true also in sport.

Assertive behavior on the part of leaders in decision-making is commonly regarded as part of the autocratic leader style but Fiedler and Beach (1978) suggest this assumption is too simplistic. They believe that the decision of leaders to act assertively is not a general trait but instead varies across situations according to the consequences expected by the person or persons involved. Dissimilarities therefore, between leaders or decision-makers who vary in assertiveness lie in differences in their expectations about these consequences. This line of research is similar to Fiedler's (1967) preoccupation with the interaction of the leader's style and the leadership situation. With respect to decision-making style therefore, Fiedler and Beach maintain that if a person possesses a rather stable, say negative, evaluation of a specific class of situations, it would be expected that he or she would be characteristically non-assertive in such situations, but not necessarily in other situations.

Adding weight to situational considerations in determining leadership and decision-making styles, and in particular their effectiveness, Reddin (1971) added a third dimension called 'environment' to two previous dimensions (relationship and task) that determined decision-making effectiveness. Reddin believed that effectiveness depends on the leader's characteristics, the subordinate, and situational variables, and the product of these three forces is what he called the environment. According to Reddin, theorists who previously argued that there was one best style of decision-making were making value judgements about the stimulus i.e. the behaviour of the decision-making unit. Similarly theorists who favored a situational approach to decision-making evaluated the response or the results (effects on the subordinates) rather than the stimulus (decision-making unit's behavior). Reddin's integration therefore of these concepts with the third dimension - the environment - allows the consideration at least that a decision-making unit's style is a stimulus in the particular situation, that can be considered effective or ineffective. But perhaps the environment or situation calls for more or less appropriate types of decision styles and evidence exists to suggest that this may indeed be the case.

Korten (1962) for example, proposed that under conditions of stress groups actually seek out and become more receptive to authoritarian styles of leadership and, perhaps more significantly, in the absence of group stress more democratic styles of leadership emerge and are preferred. Rosenbaum and Rosenbaum (1971) also found that leadership styles adopted under stressful conditions affect group performance. When the competitive nature of the group task is emphasized (a stress condition), performance is enhanced under authoritarian leadership style; conversely under low stress conditions group performance becomes optimal under a democratic style of leadership. Also, a number of authors (e.g. Fodor, 1976; Lowin and Craig, 1968; Oaklander and Fleishman, 1964; Schriesheim and Murphy, 1976) have noted that the degree of stress present in a situation influences both the decision style and leader behavior adopted by leaders, and the leader style preferred by subordinates. Such evidence suggests that in highly stressful situations (such as competition with another group or team) autocratic

decision styles are superior to democratic decision styles and also that task-oriented behavior is superior to interpersonally oriented behavior.

Debates on decisions and decision-making styles and their effectiveness must inevitably include aspects of power and influence and how they affect the success and effectiveness of any particular style. Etzioni (1961), who defined power simply as the ability to induce or influence behavior, identified two power sources: power derived from an organizational office - position power; and power derived from personal influence - personal power. Etzioni pointed out that while individuals can have both types of power and use each effectively in their decision-making behavior, the subtle differences between both types have implications on the subsequent working climate and atmosphere. Position power is delegated downwards; i.e. it comes from 'above'. Personal power, which implies a willingness to follow or be directed by an individual or individuals, comes from below i.e. from followers. French and Raven (1959) have also classified sources of power under five categories. First, reward power; and second, coercive power both of which reflect power accorded to leaders because of their control over the rewards available (similar to Etzioni's position power); third, legitimate power which a leader has by virtue of hierarchical rank; fourth, expert power which results from experience, expertise and knowledge of the task; and fifth, referent power accruing as a result of affection for the leader. The latter three sources of power can all be classified, in different degrees, under Etzioni's personal power categorization.

In a working relationship, while both Etzioni and French and Raven might favor a personal power relationship, built on consideration, affiliation and affection, a Machiavellian (1952) leader might choose a positional power relationship i.e. one built essentially on coercion and fear. Machiavelli believed that working relationships based essentially on affection alone, tended to be volatile, short run and easily terminated. Fear, on the otherhand, was longer lasting because individuals must be willing to pay sanctions (e.g. leave the group altogether) before terminating the relationship. In view of this evidence, a problem for decision-makers in business or sport is how to exercise power or discipline over people about whom you care.

Decision-makers after all, have to be careful that use of fear does not arouse hatred or evoke overt behaviors that hinder the effectiveness and syntality of a group.

Bass and Valenzie (1974) conveniently oriented the leader-subordinate relationship between four different decision styles and degrees of power. In situations where the power position is high (however perceived or bestowed) the optimum style has to reflect the degree of information available to the leader. Consequently, high and low levels of available information in high power situations demand directive and consultative decision styles respectively. Similarly, in situations of low leader power, high and low levels of available information require manipulative and delegative decision styles respectively.

With respect to the power motive (nPower) itself, McClelland maintains that there are 'Two Faces of Power' - negative and positive - which characterize two entirely different leadership styles. The negative side of power is:

> ....the one turned toward seeking to win out over active adversaries. Life tends to be seen as a "zero-sum game" in which "if I win , you lose" or "I lose, if you win"..... The thoughts of this face of power are aroused by putting..... a person in a personal dominance situation in which he is threatened.....People with this personalized power concern are more apt to speed, have accidents, and get into physical fights. If these primitive and personalized power-seeking characteristics were possessed by political office holders, especially in the sphere of international relations, the consequences would be ominous.
>
> (The positive) face of the power motive is more socialized. It is aroused by the possibility of winning an election. At the fantasy level it expresses itself in thoughts of exercising power for the benefit of others and by feelings of greater ambivalence about holding power - doubts of personal strength, the realization that most victories must be carefully planned in advance, and that every victory means a loss for someone. In terms of activities, people concerned with the more socialized aspect of power join more organizations and are more apt to become officers in them. They also are more apt to join in organized informal sports, even as adults. (McClelland, 1970, 36)

Smith (1985) has elaborated on the above and explains that the 'negative side of power' is ***based on*** selfish ambition, dishonesty, manipulation and lack of respect for others; which ***generates*** tension, fear, anxiety and mistrust amongst followers, and submissive behavior towards the leader; and ***requires*** unquestioned and 'blind' followership, and frequent use of

punishing behavior e.g. humiliation. On the other hand the 'positive side of power' is *based on* unselfishness, honesty and respect for others; which *generates* cooperation, trust, commitment and confidence; and *requires* collaborative planning, positive feedback, role clarity, role acceptance and careful use of punishment.

Research with athletes has shown that nPower is also associated with athletes in competitive sports. Winter (1973) for example, has shown that nPower in college men is closely related to excellence in man-to-man sports like football, tennis and basketball, where each player tries to control or dominate his opponent. In the same study nPower was not so closely associated with sports like track, swimming and golf in which the competition is more with nature or the clock than against a particular opponent. The power motive was emphasized clearly in assertive actions by individuals and other indicators such as the tendency to argue or to behave in an impulsive aggressive manner, which also correlated with nPower.

Clearly the aforementioned research on decision-making styles and the nature of power in leadership situations has important implications for decision-makers in any setting. These in turn assist in our understanding of different working environments and the motivation to work - an area of study initiated by Mayo's (1933) reports on job efficiency at the Western Electric Hawthorne plant as far back as 1924. Although the following bears no specific reference to either sport or coaching, the relationships that can exist between executive/subordinates and athletes/coaches are so similar that this particular research cannot be overlooked. Highly relevant implications drawn from such research have already laid the foundations for cross referenced work in sport leadership and sport decision-making.

In light of the current focus on the effects of decision-making, the most significant findings in Mayo's (1933) reports were the conclusions that the most significant factor affecting organizational productivity was the interpersonal climate that 'developed on the job'. Groups of workers felt that when their goals were in opposition to those of management, as often happens in closely supervised situations, and they had no significant control over jobs or the environment, productivity levels remained low or, worse still, were even lowered. The

Hawthorne findings therefore strongly suggested that management should try to involve workers in planning, organizing, and controlling their own work in efforts to secure positive cooperation, achievement of organizational goals and, hopefully, enhanced productivity levels. Mayo's research at the Hawthorne plant paved the way for further research on working environments and working motivation e.g. the development of Theory X and Theory Y (McGregor, 1960), Theory Z (Ouchi, 1981), and the Motivation-Hygiene Theory (Herzberg, 1966).

McGregor (1960) believed that any business organization, with its centralized decision-making, superior-subordinate pyramid and external control of work, was based upon different assumptions about human nature and human motivation. The first theory (Theory X) therefore assumes that most people prefer to be directed, are not interested in assuming responsibility, and seek safety and security above all else. Accompanying this philosophy is the belief that people are motivated by money, fringe benefits and the threat of punishment. Leaders who follow Theory X assumptions according to McGregor, attempt to structure, control, and closely supervise their employees. McGregor's Theory Y, on the otherhand, assumes that people are not by nature lazy and unreliable, and that workers can be basically self-directed and creative at work, if properly motivated. The essential task of management therefore, is to unleash this potential in individuals since properly motivated people can achieve their own goals best, by directing their own efforts towards accomplishing organizational goals.

A more recent view of organizational climates and human nature, conveniently called Theory Z, is based on comparative lessons that can be learned from Japanese management styles and working environments. As an extension of Theory Y philosophy, Ouchi (1981) highlights two lessons non-Japanese organizations can learn from Theory Z. These are 'trust' among the work force, and 'subtlety' in interpersonal relationships which, in Japan at least, has fostered high levels of intimacy in the work force. Quality control circles (also Japanese in origin) accompany the sentiments of Theory Z allowing significant input from all levels of the work force to decisions made on almost all aspects of organizational policy and production. The

U. S. Ford Motor Company and its slogan 'Quality is Job One' represents just one example of the impact of Theory Z philosophies on North American industry.

Returning to Theory X-Theory Y, McGregor (1960) pointed out that managers or group leaders should not immediately think Theory X is bad and Theory Y is good. Both are simply attitudes or predispositions towards people. So although the best assumptions for a manager or leader may indeed be Theory Y it may not be appropriate to behave consistent with these assumptions all the time. For example, a certain leader may have Theory Y assumptions about human nature but may also find it necessary to behave in a very directive, controlling manner with some people in the short term, to help them mature in a developmental sense until they are truly Theory Y individuals. Such differences in attitude and behavior for both X and Y situations were identified by Argyris (1971).

In regard to X and Y situations Argyris (1971) suggested that interpersonal behavior, group dynamics, and group norms can be represented by A and B patterns of behavior respectively. The A pattern is situations in which individuals do not own up to feelings, are not open, reject experimenting and do not help or encourage others to engage in those behaviors. Also characteristic is a high degree of structure and close supervision in the working climate. In B pattern situations individuals do own up to feelings, are open, experimenting and supportive of others who engage in those behaviors. This type and/or pattern of behavior tends to be more supportive and facilitating, and according to Argyris (1971), leads to norms of trust, concern and individuality. While XA and YB are the most frequent combinations, some leaders may be XB or YA. XB managers believe people need to be told what to do all the time and that close supervision leads to increased productivity (similar to the Machiavellian rationale for using position power or fear motivation). Also, XB managers use this behavior in situations where their role and role performance is pre-determined by the organization. An example from sport might be a professional coach who may exhibit certain behavior because the club's general manager expects it of him. YA managers on the otherhand, believe people are self-motivated but they have to be controlled and closely supervised either because they too work for

controlling people who demand such behavior or because it is necessary to behave in a directive, telling manner for a certain period of time.

Argyris (1971) was also able to distinguish between A and B patterns of behavior by first of all highlighting the distinction between the interpersonal relations inherent in the value systems of X and Y environments. Theory X is characterized by poor, shallow and mistrustful relationships, where free and natural expressions of feelings are not permitted. According to Argyris, this leads to non-authentic insincere or phoney interpersonal relationships. Theory Y management, on the otherhand, leads to authentic, trusting relationships and the resultant atmosphere is sympathetic to each individual as a human being whose complex set of needs are all important at work and throughout life. The challenge therefore, for management or leaders in any organizational setting, including coaches of sport teams, is complex. Specifically it is to provide working climates in which everyone has a chance to grow and mature as individual members of a group by satisfying individual needs, while at the same time working for the success of the organization or group. Implied here is the belief that people can be basically self-directed and creative at work if properly motivated.

The subject of motivation and work has been addressed by Argyle (1972) who analysed this area under three headings - economic motivation, intrinsic motivation, and social motivation. While financial incentive (economic motivation), which may or may not be contingent on results, is a key motivator to work in business settings, its relevance in analysing amateur sport motivation is limited. On the otherhand, Argyle's account and appraisal of the significance of intrinsic and social motivation on work attitudes has clear relevance to sport and for decision-making in particular. Both intrinsic and social processes accrue from participating in the social systems of any organization and involve feelings of affiliation, achievement, autonomy, self-actualization, recognition and fair evaluation (by both peers and management). Argyle's emphasis on how participation in decision-making fosters satisfaction in both intrinsic and social motivation is supported by Nord (1976) who found that groups whose members participated in determining goals had higher morale and showed more commitment to

organizations than more authoritarian groups. March and Simon (in Vroom and Deci, 1970) also maintained that merely the opportunity to participate in organization affairs, especially those affairs that have direct or indirect consequences on the individual, had significant positive affect on job satisfaction and decisions to stay with the particular organization.

Assertions on the importance of participation in decision-making on motivation to work, leads into the final section of this review on decision-making and looks more closely at the broader implications of participation in general. Some decision-making contingency models, predicated primarily on participation in business and sport settings, are also reviewed.

D. THE NATURE OF PARTICIPATION IN DECISION-MAKING

Participative decision-making in business settings has been proposed as an alternative to centralized forms of managing decisions because in some situations centralized decision-making tends to be ineffective. In sporting contexts Sage (1973) has advised coaches to allow greater participation in decisions because, according to Sage, this is one step towards becoming more aware of athlete needs. Sage parallels coaching climates to those in management:

> With the rise of increasingly institutional and codified team organization, many coaches have tended to view team members as objects in a machine-like environment where emphasis is on instrumental rather than consummatory behaviors. Thus, the players become another man's (the coach's) instrument; and are used to reach the objectives and goals of the organizational collectivity; they are reduced to cogs in the organization's machinery. Accordingly coaches have structured coach-player relations along authoritarian lines; they have analyzed and structured sports team positions for precise specialization of the performers and they have endeavored to control player behavior not only throughout practice and contest periods but also on a round-the-clock basis, e.g. grooming rules, training rules, and dating behavior. Furthermore, for incentives and rewards, a system of letter awards, newspaper stories, locker room posters, helmet decals, have been used. An observer at many athletic team practice sessions might believe that he was viewing a factory assembly-line work shift. Indeed the coaches punctuate the air regularly with shouts of work! work! work!. (Sage, 1973, 36)

The view, expressed by Sage and others, that participation in decision-making is universally

good, is however, over-simplistic for at least two reasons. First, participation takes on different meanings depending on the type of decision and the circumstances under which it is being made; and second, the issue is not how much people participate in organizational decisions, the issue appears to be who participates, to what degree and in what decision (e.g. Vroom, 1964).

Perhaps the first thing that must be remembered about participation is that the decision process is social in nature because people no longer decide alone. Maier (1967) has pointed out that although groups use the same decision process as individuals the advantages and drawbacks of group decision-making are dissimilar. A summary of these advantages and drawbacks are listed in Table 1.

A second aspect that must be remembered is that the decision whether to use group decision-making or not, is a decision itself and not an easy one. It involves many factors. Locke and Schweiger (1979) reviewed the results of many studies in which participation was used and from available findings they found that in terms of actual productivity increases, participation had either a negative effect or no effect in almost 80% of the cases. In fact there were just as many decreases in productivity caused by participation as there were increases. On the otherhand, in only 40% of the studies was there either a negative effect or no effect on satisfaction, while over 60% of the studies reported a positive impact of participation on satisfaction. According to Locke and Schweiger therefore, the research seems to suggest that participation may or may not increase productivity but that it probably will increase satisfaction.

Studies have also indicated that participation differs along a number of important dimensions and is more or less conducive in different styles of groups. Parker (1977) suggested that participation would be most effective in 'expressive' groups in which people were permitted to express their feelings. Other types of groups identified were the 'nice group' where people did not speak up unless they said 'nice things'; the 'abusive group' where anything goes and those who cannot stand it have to leave; and the emotionally absorbing group where

Table 1

The Effects Of Participative Decision-Making In Groups

	Assets		Liabilities
1	Groups can accumulate more knowledge and facts.	1	Groups tend to work more slowly. They take up more time to reach a decision, and time costs money.
2	Groups may have a broader perspective and consider more approaches and alternative solutions.	2	Group effort frequently results in compromises which are not always the optimal decisions from an effectiveness perspective.
3	Individuals who participate in the decision process are more likely to be satisfied with the decision and support the decision.	3	Groups can be and frequently are dominated by one individual or a small clique.
4	The group decision process serves as an important communication device and political device.	4	Too much dependence on group decisions can limit management's ability to act quickly and decisively when necessary.

(Maier, in Mitchell, 1982, 315)

feelings were expressed but no action was likely because nobody really cared. Guzzo and Waters (1982) confirmed similar relationships but with affect expressive groups. They found that the highest quality decisions and the most diverse alternatives came out of groups that delayed their affect expression. Early expressions of affective reactions apparently produced two dysfunctional consequences in their laboratory setting - reduction in group energy and narrower ranges of accepted ideas.

Bales (1973) identified three basic dimensions along which participants in group decision-making can be placed. These are the dominant/submissive, friendly/unfriendly and work-acceptant/work-resistive dimensions. Briefly, Bales believed that somebody's place in the dominance dimension could be detected by whom people addressed their remarks to in a group. People low in the dominance hierarchy generally address their communications to those higher up because they wish to increase their influence and acceptance; dominant members, on the otherhand, speak to the whole group (or to God!). Individuals with positive feelings are likely

to be calm and trusting while negative persons are likely to be anxious and suspicious and perceived as unfriendly, isolated, and tending to disagree. Finally, Bales believed that some people basically accept authority while others tend to reject it. The significance of these dimensions is that individuals in group decision-making situations can be differentially located in terms of their roles which affect to a greater or lesser extent the degrees of their participation.

Other dimensions of participation were proposed by Mitchell (1982). Participation can be forced or voluntary, direct or indirect and, in general, the more formal or legally-mandated the participation e.g. in the case of a player's representative whose job is to attend meetings on the players' behalf, the more indirect is the participation. Participation can also vary in its degree, content and scope. For example, participation can go from information gathering to actual decision-making in a number of different types of situations e.g. personnel matters (hiring and firing); job matters (assignments, work methods); working conditions (hours, safety), and organizational policy (expansion, profit sharing). In view of the above perhaps *participation* in decision-making is more complex than is currently thought, and appears to have its limitations. Some of these limitations are reviewed in the following.

According to Yukl (1971) the degree of importance of the decision to subordinates is an important situational determinant for the successful use of participation in decision-making. In matters that appear unimportant to subordinates autocratic means result in more successful resolutions. The degree to which subordinates trust their leader to make decisions favorable to them also affects the levels of need to participate in order to protect interests. Yukl also suggests that when group goals and their attainment are spelled out clearly and are important, groups tend to expect the leader to make most of the decisions. This is especially the case in larger groups where individual influence is often perceived to decline as a function of the size of the group.

Participation is likely to prove unsuccessful in situations where the management is basically dead set against it (Krishnan, 1974) and in situations in which subordinates either

know very little or care very much (Hespe and Wall, 1976). Management therefore, must either want participation or not at all, and subordinates must be interested and at least moderately knowledgeable in the subject or situation under consideration. In regard to the latter point Mulder (in Brandstatter et al, 1978) believes that participation is only effective when the differences in expertness amongst subordinates and management are very small. Smaller differences in expertness allow less expert persons to catch up quickly which subsequently raises their aspirations to exert influence.

Mulder also found that higher expert power of a subject (A) resulted in more effective influence on another subject (B) than lower expert power. The more expert power person A had, and the greater the extent of participation of subject B with A in the decision-making, the greater A's effective influence on B. Greater participation itself, in otherwords, does not result in power equalization in group decision-making but enables individuals with the most expert power to increase their effective influence over the participation. Such evidence sheds doubt over the utility and benefits of using expert power especially when high expert persons often tend to be disinclined to explain key concepts and procedures that can enable less expert persons to think for themselves. Similarly, large discrepancies between experts and non-experts discourages the latter who see little or no possibility to reduce the discrepancy to a degree that real participation becomes possible.

Alienation, distrust and submission are feelings commonly associated with non-experts in conditions such as these and although Mulder (in Heller and Wilpert, 1977) stresses expertness in the decision area as a necessary condition for effective participation, the inconsistencies and strain caused by differing degrees of expertness amongst the group can seriously restrict real participation in the actual decision-making process. Summing up the implications of the above in a practical context Louden (1980) questioned whether all staff in school administrations should be involved in every decision that pertained to education.

> Zones of indifference appear in education ..... a concept that suggests that for an

> individual to be interested in participation he must have not only some stake in the outcome, but the capability of contributing to the decison affecting the outcome. (Louden, 1980, 20)

Louden suggests that perhaps the linear relationship between participation and one or other aspect of effectiveness in decision-making is questionable and quite likely invalid altogether.

In athletic contexts the reservations expressed in the above, in regard to subordinate participation in decision-making, also have significant implications on conducting goal setting procedures in sport. Undoubtedly one of the most replicable findings in the psychological literature is that goal setting has beneficial effects on performance in both business and sport settings (Carron, 1984). These benefits have been explained by four motivational mechanisms: directing action, mobilizing effort, persisting with effort over time, and generating motivation to develop relevant and alternative strategies for reaching goals (Locke et al, 1981). However athletes and coaches have been taught that above all else, for goal setting to be effective, 'goals must be *athlete* goals' (Botterill, 1979; 1983). Particularly in goal identification the emphasis on athlete as opposed to coach regulation has been fairly explicit. Athletes are typically advised that:

> When undergoing the process of identifying goals and ordering their priority, several key questions need to be addressed. How long have you (the athlete) wanted this particular goal? What have you done to date to achieve it? How close have you come to attaining your goal? Why is it important to you to achieve this goal? The goal has to be put in proper perspective by determining your current level of performance. From that point, you and the coach can develop the program which will lead to the desired level. (Harris and Harris, 1984, 135)

In light of the evidence that limits authentic athlete/subordinate participation in decision-making however, perhaps this athlete centered approach to effective goal setting needs to be reconsidered.

Certainly, there is evidence from business studies that goals derived from autocratic procedures are not any less effective than goals arrived at from leader/subordinate consultation

(e.g. Locke and Schweiger, 1979). In sport, with regard to performance outcomes it has been suggested that:

> coaches should not assume that athletes are capable of evaluating success on their own, because athletes often have inadequate reference points and cannot be objective about themselves. (McClements and Botterill, 1979, 201-202)

The problems for leaders therefore, are not only inherent in deciding how to decide, but how to effect optimum decisions on behalf of individuals or, more commonly, on behalf of groups.

Mitchell (1982) has listed some types of problems that often arise in group decision-making meetings that undoubtedly pertain to both business and sport settings.

> 1. certain individuals talk more than others.
> 2. high-status (expert) individuals have more impact and influence on the decision than low-status (non-expert) individuals.
> 3. groups tend to waste time on interpersonal soothing.
> 4. groups often lose sight of their goal and get off on irrelevant issues.
> 5. and group members often experience extreme pressure to conform.
> (Mitchell, 1982, 318)

Stumpf et al. (1979) however suggest that before groups meet, leaders could (and perhaps should) identify/formulate the problem, define the decision criterion, arrange a suitable meeting area (where, when, size of group, physical characteristics of the room, etc.) and select the type of group per group function. Their contingency model also highlights the importance of how leaders choose the type of group, which would depend on how, in a given situation, the leader combines information on the following: the need for a high quality decision, the breadth of the people involved, the availability of expertise, the possibility of group conflict, the need for originality and the need for acceptance.

Stumpf et al.'s (1979) model is an example of a diagnostic approach to decision-making behavior i.e. informing and preparing the leader with sets of questions to ask

before groups convene. Establishing the distinctiveness of decision-making behavior on one hand and other leader behavior on the other (e.g. Yukl, 1971; House and Dessler, 1974; Sheridan, Downey and Slocum, 1975) was a necessary forerunner to similar diagnostic approaches (e.g. Stumpf et al, 1979) to decision-making, especially in relation to satisfaction and effectiveness.

Yukl (1971) for example, had no argument with the two general leader behavior dimensions identified by Ohio State leadership researchers (e.g. Hemphill and Coons, 1957) namely consideration, and initiating structure (*consideration* is the degree of warm, supportive and concerned conduct of leaders toward subordinates; *initiating structure* refers to the degree to which leaders define and structure roles, including their own, toward goal attainment). But instead Yukl pointed to a third discrete behavior dimension, decision-centralization (participation), that leaders used independent of considerate and/or structuring behavior (Yukl, 1971; Michalski, 1984; McDonough and Leifer, 1983). In other words this line of enquiry suggests that leaders may choose and use certain decision styles (autocratic or participative) and still behave differently. It is entirely feasible, for example, for coaches to make decisions on their own (autocratically) and at the same time implement those decisions using considerate and/or structuring behavior (democratically).

Distinguishing between decision-making and other leader behaviors significantly affected subsequent research approaches to participative leader behavior and particularly those that focussed on effective leadership. Dyson and Foster (1982, 1983) concluded from their business studies that the relationships found between participation and effectiveness are often confusing. For some aspects of effectiveness, participation and effectiveness are both directly and positively related, while for others they are inversely related.

Accepting the complex nature of group participation in decision-making and its limitations, there have been numerous attempts made to develop diagnostic models of decision-making. Perhaps the most well known and well articulated of these 'contingency models' was developed by Vroom and Yetton (1973).

Vroom and Yetton's Contingency Model of Participative Decision-Making is formulated on the belief that the effectiveness of any decision is contingent upon the product of two components. First, the quality of the decision, and second, its acceptance by subordinates. Vroom and Yetton identified a total of seven situational variables as having influence on the overall effectiveness of decisions. These were:

1. Quality - does the problem possess a quality requirement?
2. Information - does the decision-making unit have sufficient information to make a quality decision?
3. Structure - is the problem structured?
4. Acceptance - is acceptance of the decision by subordinates important for effective implementation?
5. Prior Probability - if the decision-maker were to make the decision him/herself, is it reasonably certain that the decision would be acceptable to subordinates?
6. Goal Congruence - do subordinates share the organizational goals to be attained in solving this problem?
7. Conflict - is conflict among subordinates likely in preferred solutions?

With reference to decison-making styles Vroom and Yetton included the autocratic, delegative, consultative, and participative types, but expressed reservations about the explanatory power of each if the various situational properties were not taken into account. Their model was devised to help business managers increase their effectiveness in diagnosing decision problems and deciding when to increase (or decrease) participation by subordinates. It was suggested that managers could choose a decision style suited to the situation that was optimally acceptable for both management and followers. Certain tasks and organizational environments are not only suited for participation, they call for it. On the otherhand some other tasks and environments require more autocratic decision methods. Vroom and Yetton highlighted the fact that participation could and very likely should be used more often in appropriate situations. Margerison and Glube (1979) who also expressed the need for greater worker participation in decision-making in industry, found support for the external validity of Vroom and Yetton's theoretical model. For example:

> executives in 'high agreement' with the Vroom and Yetton model, had workers with a higher productivity and higher satisfaction than those leaders who were low in agreement with the model. (Margerison and Glube, 1979, 52)

Taking as their lead Vroom and Yetton's (1973) decision model, Chelladurai and Haggerty (1978) conceived the Normative Model of Decision-Making in Coaching. Chelladurai and Haggerty acknowledge that decision-making is separate from other sets of coaching behavior but also recognize that the question of how much control athletes should be given in making decisions is as critical in team sports as it is in industrial settings. Their model, depicted in Figure 1 indentifies three types of decision-making styles in coaching team sports.

The ***autocratic style*** describes the process in which the coach alone makes the final decision. This style includes a consultative approach where the coach might consult with any or all of his or her players about a specific problem before reaching a decision alone. Second, is the ***participative style*** in which the decision is made by the the group including the coach. The coach's role in this context is like that of another team member so the decision is reached jointly through group consensus. Third, is the ***delegative style*** where the coach allows one or more team members to make a decision on behalf of the group (which includes the coach). The coach is only involved in the announcement of the decision and in its implementation. The three recommended styles are then related to seven decision attributes or questions, similar to those described by Vroom and Yetton. The attributes are designed to help coaches increase their effectiveness in diagnosing coaching problems and in decisions to increase or decrease athlete participation in the decisions that need to made. According to Chelladurai (1981) the attributes suggest the following:

> 1. If there are time restrictions, the participative style is ruled out since group decisions take time (see box 1 - Figure 1)
> 2. Some problems warrant the selection of the best alternative (e.g. designating a quarterback in football), while others may be resolved by any of the acceptable alternatives (e.g. nominating a captain). This quality requirement is an important determinant of the style to be used. (see box 3 - Figure 1)
> 3. The greatest advantage of group decision is that the vast amount of information

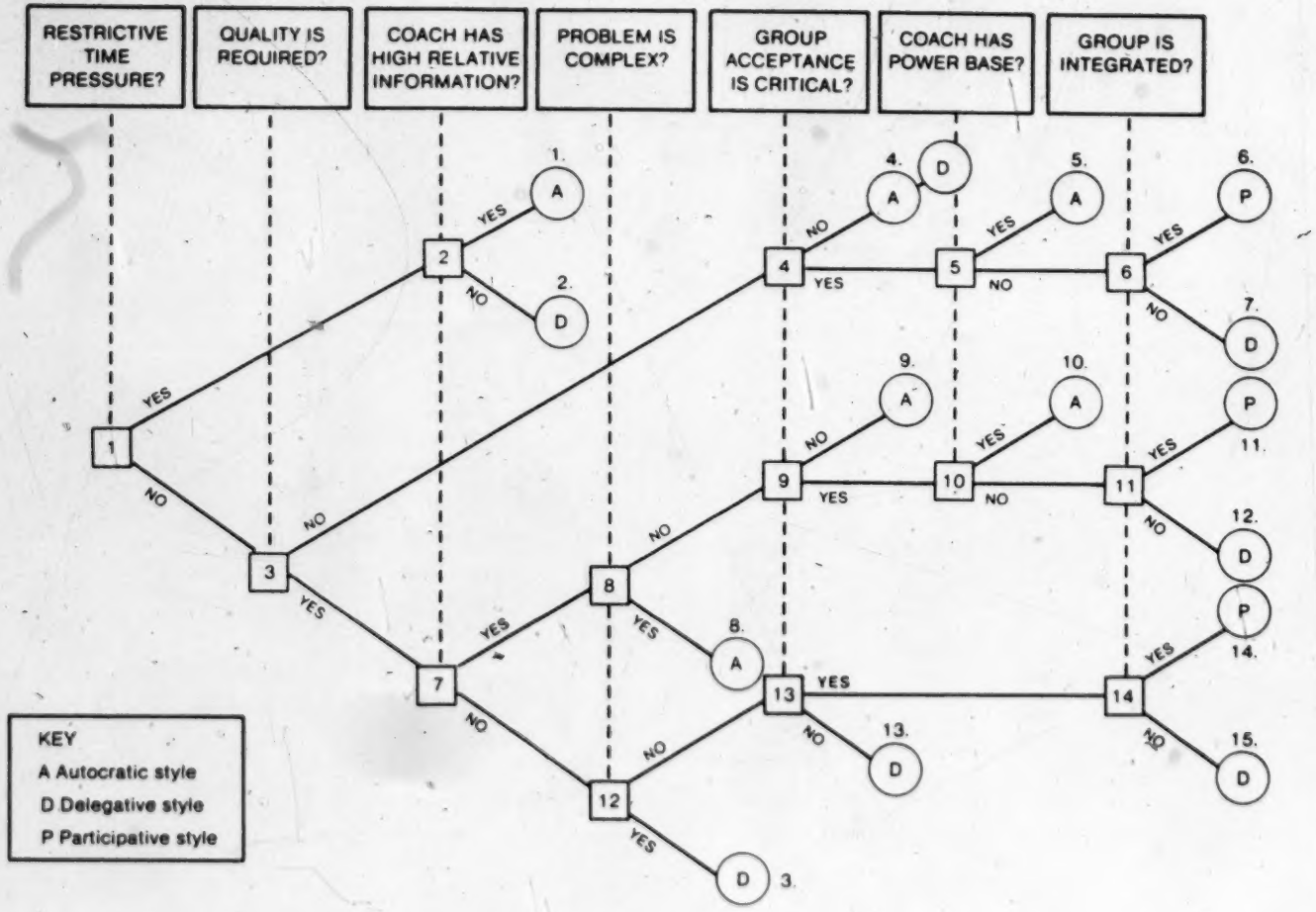

Figure 1. Normative Model for Decision Styles in Coaching (Chelladurai and Haggerty, 1978).

in the group can be brought to bear upon the quality of the decisions. But it is also possible that the group members may be less knowledgeable in the sport than the coach and less informed about the actual and potential performance capabilities of the members. In such a case, participative style would result only in the pooling of ignorance. (see box 2 - Figure 1)

4. If the problem is complex involving a series of interlocking steps and combinations, an individual with sufficient knowledge (the coach) can do a better job than the group with equal knowledge. (see boxes 8 and 12 - Figure 1)

5. For any decisions to be effectively implemented it must first be accepted by the group as practical and useful. Wherever such acceptance is crucial, participative style should be adopted. (see box 4, 9 and 13 - Figure 1)

6. If, however, the coach enjoys the love and admiration of the members, where the expertise and knowledge of the coach is acknowledged, and where the coach has control over the rewards and punishment, his/her decisions may be fully accepted. That is, with such power over the team, the coach may make autocratic decisions even when group acceptance is critical. (see boxes 5 and 10 - Figure 1)

7. Finally, the quality of interpersonal relations among group members and the relative homogenity of the team in their orientations, tenure and ability would point out to a participative style. If these conditions are negative, a participative style will only lead to inferior decisions and disrupt the already fragile solidarity of the team (see boxes 6, 11 and 14 - Figure 1) (Chelladurai, 1981, 5)

However, Chelladurai and Haggerty's (1978) theoretical model outlines only normative prescriptions for coaches. In otherwords, the model can only suggest what coaches would *normally* do given the contingencies arranged by sets of problem attributes. This conceptual model therefore requires empirical testing in actual coaching situations not only to validate the model's prescriptions, but also to examine decision-making styles of coaches separate from other coaching behaviors. An examination of the appropriateness of coaching decision styles should also take into account the opinions and perceptions of athletes. Their acceptance of chosen coaching decision styles determines to a large extent the effectiveness of that style in coaching decision-making.

Using the model, Arnott (1982) investigated the decision-making styles preferred by athletes in competitive basketball. Limited to only the problem attributes that related to decision quality as described in Chelladurai and Haggerty's theoretical model - quality requirement, information available, problem complexity and group integration - the conclusions from the study were not entirely favorable in regard to the model's utility in athletics. For example, although males agreed more than females with the model's prescriptions

for decision styles, the hypothesis that a greater proportion of athletes would prefer decision styles specified by the model was unconfirmed. Furthermore, both male and female basketball players reported a concomitant preference and dislike for autocratic and delegative decision styles which also contradicted the model's prescriptions (and the study's hypotheses). However, Arnott acknowledged some restrictions in the investigation that preempt much of the criticism of the theoretical model, and thus made three notable recommendations for future study. First, a more comprehensive test of the model involving all seven problem attributes identified in the theoretical model; second, using coach responses, not athlete responses, to verify theoretical prescriptions for decision style choices; and third, both coach and athlete responses should be subsequently related to team effectiveness measures.

The purpose of the current study therefore, includes an attempt to determine the validity and applicability of Chelladurai and Haggerty's (1978) Normative Model of Decision Styles in Coaching and the model's utility in diagnosing decision-making problems in a specific sporting context - Intercollegiate soccer. Head soccer coaches are asked how they would decide in soccer situations, and comparisons are made with the model's predictions of what coaches would normally do. Second, the congruence between decision styles chosen by coaches and preferred/perceived by athletes for the same situations, is also examined. And third, coaching effectiveness measures perceived by athletes are related to the discrepancy in coach/athlete preferences in decision styles. From research evidence in management science (e.g. Morse and Wagner, 1978) low discrepancy scores between coach and athlete preferences for decision styles are expected to be related to higher ratings of coaching effectiveness as perceived by athletes.

E. LEADER/COACH BEHAVIOR

Historically, the focus on leader behavior has followed on from the 'trait' approach which assumed a hereditary basis for leadership and leader qualities, as in the 'great man' theory. Subsequent attempts to describe different leader behaviors led to proposals of different behavior taxonomies. For example, the Ohio State leadership studies (e.g. Fleishman, 1953,

1957; Halpin and Winer, 1957; Hemphill and Coons, 1957) evolved into Stogdill's (1974) twelve category taxonomy; and the early Michigan studies (e.g. Coch and French, 1948; Morse and Reimer, 1956; Tannenbaum and Allport, 1956) evolved into Bower and Seashore's (1966) four factors. More recent examples of behavior taxonomies (e.g. House and Dessler, 1974; Bass and Valenzie, 1974; Schriesheim, 1978) have been summarized in the nineteen behavior categories described in detail by Yukl and Nemeroff (1979). But in spite of the elaborate detail of these taxonomies, they unfortunately fail to account for the great diversity of behavior required and exhibited by every functioning leader including coaches.

The failure to produce a widely acceptable taxonomy of leadership or coaching behavior is testimony to the futility of research approaches that focus solely on *leader* behavior. Behaviors associated with a leader are not limited to one person who acts alone. Leaders in any circumstance have a dynamic relationship with followers who not only influence leadership behavior but also perceive and evaluate such behavior in the context of situational demands. The following discussion highlights a number of theories that have attempted to account for and accommodate different behavior which is more or less appropriate in different leadership situations. The research results from using Contingency Theory (e.g. Fiedler, 1967), Path-Goal Theory (House, 1971), Situational Theory (Hersey and Blanchard, 1977), and Adaptive-Reactive Theory (Osborn and Hunt, 1975) are drawn from studies that focused on athletic contexts.

Contingency theories of leadership are concerned with the moderating influence of situational variables on the relationship between leader behavior or traits, and end result variables, such as group performance. These theories assume that different situations require different patterns of traits and behaviors for a leader to be effective. For example Fiedler's (1967) Contingency Theory assumes that the contribution of leaders to successful group performance is determined both by certain leader personality characterisitcs and by features of the situation. This particular contingency model combines trait and situational approaches to leadership and focuses primarily on a disposition Fiedler terms esteem for least preferred

co-worker (LPC). According to Fiedler 'low' LPC leaders who perceive least preferred co-workers negatively, seem to be primarily motivated toward successful task performance and adopt a directive authoritarian leadership style. In contrast, 'high' LPC leaders who perceive least preferred co-workers more favorably, seem to be mainly concerned with establishing warm and friendly non-directive leadership styles. The sport studies that have confirmed and supported Fiedler's propositions (e.g. Kjeldson, 1976; Konar-Goldband et al, 1979) are overshadowed by numerous other studies that have not found support for the Contingency Theory (e.g. Naylor, 1976; Danielson, 1976; Horwood, 1979; Gordon, 1981). It seems that in sport, as in business settings this model suffers directly from its focus on LPC scale measures, their interpretation, and also Fiedler's assumptions on the nature of effective leadership which is considered only in terms of performance success.

The Path-Goal Theory of Leadership attempts to explain the relationship between leader behavior and the motivations of subordinates, and puts a premium on follower satisfaction and acceptance of the leader. After an early non-situational version of the theory was proposed by Evans (1970), House (1971) formulated a more elaborate interpretation of the theory that included situational variables. The theory has been further refined and extended in more recent years (House and Dessler, 1974; House and Mitchell, 1974). Two contingency factors in the theory are; first, the personal characteristics of the followers; and second, the environmental pressures and task demands that the subordinates face. The theory's two central propositions are; first, the leader behavior is acceptable to subordinates if they see such behavior as either immediately satisfying to them or as likely to determine their future satisfaction; and second, the leader's behavior increases subordinates' effort if such behavior makes the satisfaction of subordinate needs contingent on effective performance. The leader's behavior compliments the environment of the subordinates by providing support and especially guidance for effective performance. The leader's role is supplemental - coaching, guiding, supporting and rewarding individuals in various tasks - but, by necessity, changes according to the differential tasks engaged in by the subordinates.

Chelladurai and Saleh (1978) tested this model in an athletic context and found evidence that both confirmed and disputed the theory's propositions. Support was found from individuals in the study who preferred interdependent (team) sports who also preferred increased training behavior by coaches - behavior aimed at improving performance by stressing rigorous training and clarifying relationships amongst team members. Results contrary to those predicted by the model concerned individuals in closed sports (e.g. most track and field events) who reported a greater preference for training behavior than individuals with a preference for open sports (e.g. racket sports). Chelladurai and Saleh suggested that training behavior, which is analogous to interference according to Path-Goal theory, was probably viewed as motivating for individuals who participated in closed tasks which are characterized by repetitious and monotonous activity.

The main criticisms of this theory (e.g. Yukl, 1981; Schreisheim et al, 1976) concern certain conceptual assumptions and deficiencies. Some conceptual confusion stems from a failure to specifically define leader behavior variables and some causal relationships with performance; and second, the interaction of different situational variables which only partially represent the total picture in athletic and business contexts have not been specified. The most significant implication for the present study however, is the theory's notion that performance and satisfaction are a function of the congruence between actual leader/coach behavior and athlete preferences for such behavior. Although extensions and refinement of the theory have been made to make it less ambiguous and more comprehensive (e.g. Graen and Cashman's Role Making Model, 1975), its primary focus on only subordinates still severely restricts its utility in sport leadership research.

The Situational Theory of Leadership of Hersey and Blanchard (1969, 1977) was originally referred to as the Life Cycle Theory of Leadership. Its major propositions are that:

> as the level of maturity of their followers continues to increase in terms of accomplishing a specific task, leaders should begin to reduce their task behavior and increase relationship behavior until the individual or group reaches a moderate

> level of maturity. As the individual or group begins to move into an above average level of maturity it becomes appropriate for leaders to decrease not only task behavior but also relationship behavior. (Hersey and Blanchard, 1969, 167)

Chelladurai and Carron (1978) acknowledged the difficulty of extending the operationalization of 'maturity' to athletics but agreed that the leader orientations suggested above would appear to be consistent with coach orientations on a continuum of junior high school through to professional sport. However, studies by Danielson (1976) in minor hockey and Gordon (1981) in elite soccer, did not provide findings consistent with this proposal. Both these studies used Fiedler's (1967) situation variables - leader/member relations, task structure, and the leader's power position - and found that increased relationship oriented behavior (as opposed to task oriented behavior) was positively related to both team performance and effectiveness across all levels of situational favorableness. Based on specifically Danielson's study, Chelladurai and Carron (1978) therefore suggested a relocation of high relationship orientations of coaches in the Situational Theory:

> ...when an individual matures through the various stages from elementary to professional sports the most appropriate leadership style should vary from low task/high relationship (Q1), to high task/high relationship (Q2), to high task/low relationship (Q3), and finally, to a low task/low relationship (Q4). (Carron, 1980, 121).

A relationship approach to coaching younger athletes was also strongly recommended by Smith et al (1979) in their study of Little League baseball coaches. The coaches in the study who were trained to increase relationship oriented behavior, were rated by their players as better teachers and more knowledgeable than coaches in the control groups who were not similarly trained. Furthermore, of particular relevance to the present study's focus on coaching effectiveness, the same athletes reported higher degrees of enjoyment and greater desire to play for their coaches in the future.

In a study from women's inter-collegiate basketball Vos Strache (1978) also found contrary evidence to situational theory proposals but acknowledged that the range represented by the class level of athletes (homogeneity of maturity) may not have been broad enough to allow for a differentiation in maturity. Vos Strache however, did find partial support for Path-Goal Theory and suggested that losing coaches may not have clearly identified the path for success for their team members. Starting athletes perceived their coach to be more persuasive than non-starters therefore assisting the starter in clarifying the direction for effective performance. Although athletic maturity was not an important factor in a study by Case (1980) of successful basketball athletes and coaches (from junior high, senior high, college, and A. A. U. teams) Hersey and Blanchard's propositions were again unconfirmed. Case however did obtain support for Chelladurai and Carron's (1978) modified version of situational leadership theory but only in regard to task orientation which, it was specified, should be emphasized more and more as stages of athletic maturity increase or advance. The results concerning relationship orientation however did not support Chelladurai and Carron's proposal nor the propositions of Hersey and Blanchard (1977).

In a more recent study of the relationship between athletic maturity and preferred leadership Chelladurai and Carron (1983) pointed out two significant weaknesses in the approaches by Vos Strache and Case. First, both studies used a general measure of leader behavior (the LBDQ - Halpin and Winer, 1957) instead of sport specific inventories (e.g. the Leadership Scale for Sport - Chelladurai and Saleh, 1980) which are vastly superior in exacting coaching behavior in sport situations; and second, both Vos Strache and Case inferred leadership effectiveness from assessments of perceived leader behavior instead of preferred leader behavior. Chelladurai and Carron's emphasis and basic premise, similar to other authors (e.g. House, 1971; House and Dessler, 1974; Yukl, 1971; Osborn and Hunt, 1975) was that:

> .....leadership effectiveness is a function of the congruence between actual leader behavior and preferred leader behavior. (Chelladurai and Carron, 1983, 374)

The results from Chelladurai and Carron's (1983) study, using only training and instruction (analogous to task orientation) and social support (analogous to relationship orientation) from the preferred leadership version of the LSS, neither supported situational theory propositions nor its modification (Chelladurai and Carron, 1978). It was found that athlete preferences for training and instruction (task orientation) decreased from high school midget - junior - senior competitive levels respectively but increased dramatically at university level. On the other hand, preferences for social support (relationship orientation) progressively increased with levels of competition (as above).

Failure to confirm situational theory propositions (e.g. Vos Strache, 1979; Case, 1980) according to Chelladurai and Carron (1983) may be due to assumptions regarding athletic maturity and their operationalization in sport. For example, athletic maturity may span twenty-five to twenty-seven years (e.g. eight years to thirty-five years of age) so directly or indirectly Hersey and Blanchard's model can only be adequately tested when study samples are truly representative of this age span - the athlete samples used in the studies presented previously were not representative of this age span. And second, the question of socializing athletes into preferring more self-responsibility with advanced maturity belies the evidence that elite and especially adult elite sport is characteristically autocratic. Therefore, since autocracy does not foster athlete psychological development, perhaps the situational theory is basically an invalid and inappropriate tool for studying effective leadership in sport situations. Chelladurai and Carron (1983) concluded however, that if situational leadership theory is used further in sport situations the optimal test conditions should include the use of sport specific measures of leader behavior (e.g. the LSS) and a study sample that is representative both in age span (athletic maturity) and in terms of effectiveness (highly successful - unsuccessful coaches and teams).

Although no support for Hersey and Blanchard's propositions has been found from sport studies, the following three significant contributions have been made by Situational Leadership Theory. First, its emphasis on flexible, adaptable leader behavior; second, its

emphasis on the need for leaders to treat different subordinates differently, and third, the importance of treating the same subordinates differently as the situations change. Hersey and Blanchard (1977) have admitted that important situational variables have been ignored and that maturity needs to be defined more specifically. Their theory therefore, like the others so far presented, also has its limitations for study in sport contexts especially when operationalized on its own.

The Adaptive-Reactive Theory of Leadership is really an extension of Path-Goal Theory. The thesis, outlined by Osborn and Hunt (1975) is that macro-variables influence both leader behavior and subordinate outcomes such as performance and satisfaction. Leaders must consequently adapt their leader behavior to the larger reality in which they operate and this adaptation is reflected in the portions of leader behavior which are externally determined. Leaders are also viewed as being in a position to react to subordinates' needs, desires and influence, and this non-externally determined portion of leader behavior reflects reactions to subordinates. It is this discretionary behavior (non-externally determined leader behavior) that has greatest impact on subordinates. As the name of this theory would suggest therefore, leaders *adapt* to the larger setting in which they operate, and *react* to subordinates in areas of discretionary influence.

The theory's strengths lie in highlighting the important effect of macro-variables, and its acknowledgement of the fact that leaders/coaches operate in a network of other individuals (e.g. fans, assistant coaches, managers, trainers, athletic directors, general managers, Faculty Deans, etc.). Therefore, while most leadership studies using situational theories have focused on effective behavior in certain situations, Osborn and Hunt (1975) point out that prior questions should concern how individuals behave in given situations and which constraints exist that determine behavior. To advise on what is appropriate behavior without recognizing constraint factors does seem ridiculous since such advice would be based on the narrowing assumption that behavior is infinitely changeable. However, Adaptive-Reactive Theory, falls short of explaining the causal processes involved in different leadership situations and has

operational difficulties concerning leader self-reports. It too therefore has limited utility as a single focused approach to sport leadership but for the present study the implications of leader reactions to needs, desires, and pressures of subordinates are both significant and important.

In summarizing this section, the situational leadership theories that have been presented have fallen short of investigating coach leadership either accurately or comprehensively. They have focused only on leader characteristics and favorable situations (e.g. Contingency Theory) or only subordinates (e.g. Path-Goal Theory) or only leaders and subordinates but not situational factors (e.g. Role-Making Theory) or they have suffered from unexplained conceptual deficiencies (e.g. Situational Theory; Adaptive-Reactive Theory). More appropriate and comprehensive approaches to coaching therefore, must necessarily account for the interactional nature of the athletic context, and acknowledge *three* key moderating influences - the coach, the athlete(s), and the situation. The Multidimensional Model of Leadership provides just such a framework for studying leadership in athletics, and is a synthesis of the above approaches. Its theoretical structure and propositions are presented in the following section.

F. THE MULTIDIMENSIONAL MODEL OF LEADERSHIP

The Multidimensional Model of Leadership proposed by Chelladurai (1978), depicted in Figure 2, acknowledges the dynamic relationship between situational factors and the characteristics of both leaders (coaches) and subordinates (athletes). The approach taken is therefore interactional or transactional rather than uniquely behavioral or situational or a combination of the two.

In athletic contexts the satisfaction and performance of the athlete (consequences/outcomes) are regarded as measures of coaching effectiveness and products of the leadership process. The leadership process, which involves the interactive effects of three different types of coaching behavior - prescribed coach behavior, coach behavior preferred by athletes, and actual coach behavior - is in turn allied to preceding conditions that impinge on

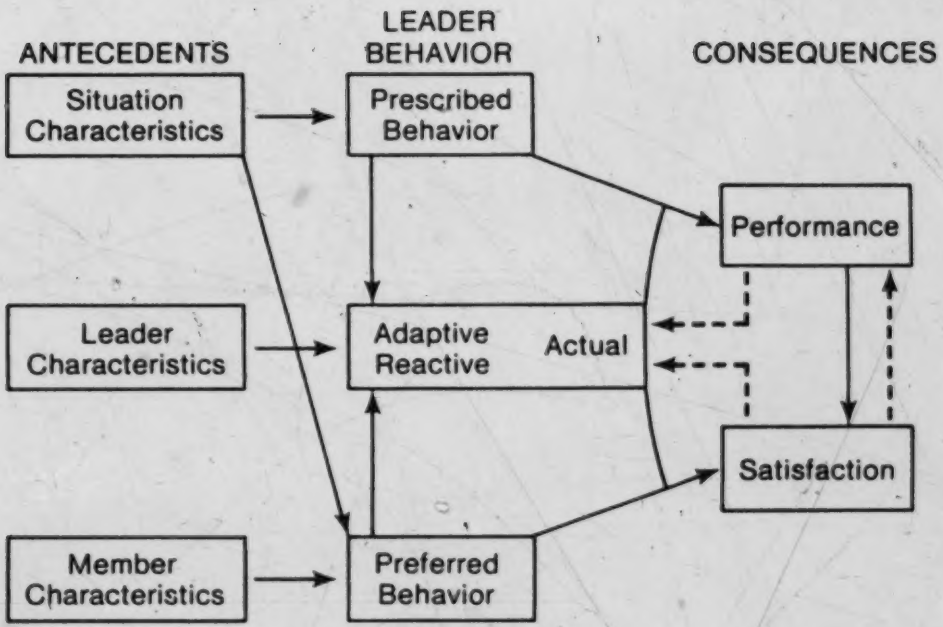

Figure 2. A Multidimensional Model of Leadership (Chelladurai, (1978).

behavior. The three separate antecedent variables referred to in the model are situational characteristics, characteristics of the leader (coach), and characteristics of the subordinates (athletes).

In regard to prescribed behavior, the model considers the combination of situational variables as setting limits for different sets of coaching behavior that can be considered more or less appropriate. The proposal that certain parameters within the athletic world influence or to some extent control coach behavior is consistent with Adaptive-Reactive Theory (Osborn and Hunt, 1975) which highlights the important impact of significant macro-variables that often govern leadership behavior, e.g. the formal structure of a group and the unit size. To be effective therefore, certain leader behavior must reflect the prescriptions of situational variables in the environment. Preferred behavior on the other hand, stems from a combination of both situational variables and member (athlete) variables. The proposition that situational characteristics influence the behavior preferences of athletes, is testimony to the socialization processes operating in athletic contexts. However Chelladurai has also acknowledged that situational effects would be moderated by the individual personality and ability differences of each athlete. Actual behavior, the third category of leader behavior, is considered to be affected indirectly by both prescribed and preferred behavior and more directly by the personality and ability (characteristics) of the leader. Consistent with the Adaptive-Reactive viewpoint advanced by Osborn and Hunt (1975), actual behavior is therefore comprised partially of the leader's adaptation to situational characteristics and partially of the reactive or discretionary responses of the leader towards athletes. Chelladurai emphasized however, that the personality orientations of the leader (e.g. task vs. relationship orientation towards athletes) and the leader's own ability were the most significant determinants of actual behavior.

The consequences or outcomes of the model focus on satisfaction and performance which Chelladurai regards as the two most salient outcomes for athletes and subordinates participating in athletics or industrial contexts respectively. In regard to both:

> Performance was defined as output of the athlete or team relative to the output of competitors or relative to one's own previous output. Satisfaction was defined as the degree to which the subordinate(s) is satisfied with the leadership he/she has experienced; it is a function of the extent to which the member sees the leader as contributing to the fulfillment of his/her needs and motives. (in Chelladurai and Carron, 1978, 68-69)

Prior to advancing hypotheses for performance and satisfaction Chelladurai emphasized that performance reflects the extent to which actual leader behavior is congruent with prescribed behavior, but satisfaction on the other hand, is more a function of the congruence between actual leader behavior and leader behavior preferred by athletes.

Consequences or outcomes of the interaction between the three categories of coach behavior described in the model (congruent or discrepant) are summarized in Table 2. In the 'Ideal' instance both performance and satisfaction would be facilitated as prescribed, preferred, and actual behavior are all congruent. In the second instance, which illustrates no congruence at all, chaos would reign as the individuals involved do their own thing regardless of the wishes and preferences of others. In the third situation, which also could not continue, the actual behavior of the leader is at odds with prescribed and preferred behavior and this leader would also have to be removed. In the fourth scenario Chelladurai suggests that performance only would be enhanced because congruence exists only between actual and prescribed behavior; satisfaction would be minimal because member preferences are disregarded. In the final possibility where leaders might emphasize discretionary or reactive behavior that is incongruent wth prescribed behavior, performances would suffer although satisfaction would not.

Finally, although performance and satisfaction are spaced separately in the model, Chelladurai recognized that, as consequences, they are not totally independent of each other. Their inter-relationship is viewed first from the perspective of task accomplishment and if the task orientation of the coach meets the needs of the athletes both satisfaction and enhanced performance will follow. Both are the result of leader behavior which is consistent with the popular view in industrial contexts (e.g. Lawler and Porter, 1967) that successful performances, orchestrated by leaders, produce satisfaction rather than vice-versa (hence the

Table 2

Relationship Between Leader Behavior Congruence And Performance And Satisfaction

Leader Behavior			Outcome
Prescribed	Actual	Preferred	
+	+	+	Ideal
-	-	-	Laissez Faire
+	-	+	Removal of Leader
+	+	-	Performance
-	+	+	Satisfaction

(Chelladurai and Carron, 1978, 70)

solid line in the direction performance - satisfaction). From the second perspective Chelladurai suggests that satisfaction accrued from interpersonal (reactive or discretionary) leader behavior could also enhance performance. For example, athletes, who produce extra effort to enhance performance might improve their interpersonal relationships with the coach. Athlete satisfaction in achieving relationship orientations in their coach therefore, also facilitates and enhances their own performance. This indirect and more tenuous relationship is represented by the dotted line in the model in the direction satisfaction - performance.

To operationalize the multidimensional model (Chelladurai, 1978) Chelladurai and Saleh (1978, 1980) developed the Leadership Scale for Sport (LSS) which assesses five dimensions of coaching behavior - Training and Instruction, Social Support, Positive Feedback (Rewarding behavior), Democratic and Autocratic behavior - in a forty-item questionnaire. In athletic contexts Training behavior and Social Support are analogous to the traditional measures of leadership behavior - initiating structure and consideration respectively. In the LSS however, Social Support, which could naturally be related to Rewarding behavior, is given without reference to performance. Rewarding behavior or Positive Feedback on the other hand, is directly related to performance. Democratic and Autocratic behavior reflect the decision styles

of coaches who allow more or less input or participation by athletes on their teams. Three different versions of the LSS can elicit responses on a Likert type scale ranging from 'always - never' on actual behavior, preferred behavior and perceived behavior. In the former category of behavior, (actual behavior) only coaches complete the LSS with each item pre-fixed by 'In coaching I....' In the latter two cases only athletes answer the same forty items pre-fixed by 'I prefer my coach to....' (preferred version), and 'My coach....' (perceived version).

The psychometric properties of the LSS, referred to more specifically elsewhere (e.g. Chelladurai and Saleh, 1978, 1980), have revealed internal consistency estimates (Cronbach's alpha) of .83, .75, .45, .70, and .82 for Training and Instruction (13 items), Democratic behavior (9 items), Autocratic behavior (5 items), Social Support (8 items), and Rewarding behavior (5 items) respectively, for the preference version; and test re-test reliability coefficients ranging from .71 (Social Support) to .82 (Democratic behavior). For the perceived version the respective internal consistency estimates were .93, .87, .79, .86, and .92 (Chelladurai and Saleh, 1980).

Two recent studies that investigated the preferred coaching behavior of both male and female athletes from 'club' (University and sport clubs in Victoria, B.C.) and 'elite' (Universiade '83 national teams) levels of participation, used the Preferred version of the LSS. The results from both studies were interpreted from differences between means in the five dimensions of behavior and led Terry and Howe (1984) and Terry (1984) to conclude the following. First, male athletes preferred more Autocratic behavior than female athletes at both 'club' and 'elite' levels of competition and participation; second, 'club' athletes in independent sports (e.g. track and field, tennis) preferred more Democratic behavior but less Autocratic behavior than 'club' athletes in interdependent sports (e.g. rowing, soccer); third, 'elite' athletes in team sports preferred significantly more Training behavior, Autocratic behavior and Rewarding behavior and significantly less Democratic behavior and social support behavior than 'elite' athletes in individual sports; fourth, 'elite' athletes preferred significantly more Democratic behavior and Social Support behavior and significantly less Rewarding behavior

than 'club' level athletes. Finally, from the results in both studies Terry summarized the main findings on preferred coaching behavior and commented on the direction for future research using the LSS as follows:

> Overall, the athletes consistently preferred coaches who 'often' display Training behavior and Rewarding behavior, 'occasionally' display Democratic behavior and Social Support behavior, and 'seldom' display Autocratic behavior. Conformity to this pattern of preferences was an outstanding feature of the results. .....For future research it would be valuable to determine the relationship between the coaching preferences of athletes and the actual behavior of coaches, and to establish whether congruity between preferred and actual behavior is associated with enhanced performance and/or athlete satisfaction. (Terry, 1984, 207)

Comparisons between the results of the above studies with indices of preferred coaching behavior in the present study may be revealing especially since this study also extends the investigation of coaching behavior, as suggested by Terry and Howe, to include congruity measures between the coaching behavior preferences of athletes and their coaches.

Returning to operationalizing the multidimensional model, the next step after collecting data using the three forms of the LSS, is to relate congruence or discrepancy scores to outcomes i.e. performance and satisfaction. Previous research (e.g. House, 1971; Osborn and Hunt, 1975; Yukl, 1971) has discussed leadership effectiveness as a function of the congruence between actual leader behavior and preferred leader behavior. Yukl's (1971) discrepancy model for example, specified that task oriented, relationship oriented and decision style oriented levels of leader behavior that are simultaneously perceived and preferred by subordinates, would be significantly related to subordinate satisfaction. Yukl however, only focused on subordinate satisfaction with the leader, not performance, but the model's suggestions on calculating relationships between discrepancy scores (behavior) and outcomes (performance and satisfaction) were subsequently adopted by Chelladurai (1984) in a recent sport study using Varsity athletes from three different sports.

The main purpose of the study (Chelladurai, 1984) was to examine the relationship between the discrepancy between preferred and perceived leadership and athlete satisfaction. In simpler terms the congruence between athlete preferences and athlete perceptions of the five dimensions of coach behavior in the LSS (independent variables) were related to each of the four facets of athlete satisfaction (dependent variables) described by Chelladurai (1984). Satisfaction levels with individual performance, team performance, leadership and overall involvement were obtained using a single question with a seven point scale (very dissatisfied - very satisfied) e.g. 'How satisfied are you with your own performance?' During the statistical analyses Chelladurai was able to conclude that the four facets of satisfaction were significantly independent of each other to be used in separate analyses with leader discrepancy scores. Discrepancy scores were calculated by subtracting the perceptions of the athletes from their preferences which was consistent with the protocol advanced by Yukl (1971), implying that deviation in either direction (positive or negative) would adversely affect levels of satisfaction. The complex calculation between preference-perception discrepancy in dyadic data was clarified by Chelladurai (1984) as follows:

> While any of three relationships is possible - linear and positive, linear and negative, or curvilinear and negative - a curvilinear relationship seems most probable....(this) would mean that the athletes would be less satisfied as the discrepancy between perception and preference increased in either direction. Simply stated, satisfaction would be maximal when there is congruence between athlete's perceptions and preferences. (Chelladurai, 1984, 30-31)

To examine the effects of task type on the leadership satisfaction relationship, Chelladurai used three different sports (basketball, wrestling, and track and field) and differentiated athlete responses according to task variability (open vs. closed sports) and nature of dependence (independent vs. interdependent sports). The results allowed Chelladurai to conclude that:

> discrepancy in leadership for athletes in various sports was associated with three

> measures of satisfaction: satisfaction with team performance, with leadership, and with overall involvement. Further, training and instruction and positive feedback were the most common dimensions of leader behavior affecting athlete satisfaction. (Chelladurai, 1984, 27)

In concluding the discussion on future research Chelladurai also recommended the addition of more facets of satisfaction that could be related to discrepancy scores including some objective measure of actual performance. The present study has therefore accommodated these recommendations and, also, extended the application of congruency/discrepancy scores to include coach data. Instead of one discrepancy score therefore, derived from only athlete responses, the addition of coach data allows a further two sets of scores. The three sets of discrepancy scores are therefore athlete preferred/perceived (Chelladurai, 1984), coach intended/athlete preferred, and coach intended/athlete perceived. The differentiation in task type (variability and/or dependence) was not emphasized in this study however, so conclusions drawn from the present study can only be generalized to interdependent-open sports similar to soccer.

G. EFFECTIVE vs. SUCCESSFUL LEADERSHIP/COACHING

The intentions in the final two sections of this literature review are twofold. First, to highlight the important distinction between effective and successful coaching styles in order that future references to coaching effectiveness are not viewed solely in terms of objective measures e.g. won-loss percentage data. Different facets of satisfaction are regarded as equally important consequences of effective leadership as performance consequences in, for example, the Multidimensional Model referred to in the previous section, and it is worth pointing out that if success (meaning winning games) is in fact the only criterion in evaluating a coach's performance and effectiveness, the majority of coaches must be failures! - and this is clearly not so. The second purpose of the final two sections is to present a rationale for using indices of satisfaction with different aspects of an athlete's involvement in sport, as measures of coaching effectiveness. The assumption here is that any coach's effectiveness is a multi-faceted

phenomenon which cannot be determined solely by achieving objective measures of actual performance. It is suggested therefore, that a coach's effectiveness also impacts on the psychological well being of athletes, and specifically their perceptions of satisfaction with performance factors, their coach's ability, different role dimensions and their overall personal involvement in sport. Based mainly on research in business and organizational settings, the following also includes important references to relevant and recent studies in sport.

The need to determine *WHAT* effective leadership *IS* seems equally pressing in military (e.g. Yukl and Van Fleet, 1982), business (e.g. Niehouse, 1983; Meckstroth, 1984), and sport settings (e.g. Horwood, 1979; Vos Strache, 1980; Martin, 1979). Researchers have applied and operationalized different leadership theories (e.g. Contingency Theory, Situational Leadership Theory, Path-Goal Theory) and recently have approached the issue from a behavior modification point of view (e.g. Martin and Hrycaiko, 1983a,b). However, with the exception of the latter approach, all of the above merely related outcomes, goals, achievement or performance success to the presence or absence of the measure of leadership used in each study. Effective or productive or successful leadership therefore, has consequently been associated with certain behavior clusters or specific leadership styles.

The notion that behavior clusters or behavior qualities alone are both necessary and desired for effective leadership is clearly absurd as explained by most situational theorists. Brown (1963) for example has noted how the behavior characteristics of some successful leaders in history have been particularly objectionable:

> Some of the most successful leaders in history have been neurotic, insane, epileptic, humorless, narrow-minded, unjust, and authoritarian; there have been religious leaders with a pathological sense of guilt, political leaders with delusions of omnipotence, and military dictators with delusions of persecution. (Brown, 1963, 219-220)

Also, the notion of particular leadership styles that are more or less effective in different situations is blurry, particularly when related to success and specifically won-loss percentage

data. Sport studies for example, have shown that success can be related to either task-oriented (e.g. Chelladurai, 1978) or interpersonally-oriented leadership styles (e.g. Siletta, 1983) and similar equivocal research results have been highlighted in studies of both female (e.g. Calloway and Driscoll, 1983) and male coaches. Swartz's (1973) study of seventy-two male collegiate coaches for example, compared four different coaching styles - laissez-faire, democratic-cooperative, autocratic-submissive, and autocratic-aggressive - and related each to successful (won-loss record over 50%) or unsuccessful (won-loss record less than 50%) data. Swartz found that successful and unsuccessful coaches employed essentially similar leadership styles. The conclusions therefore, on coaching effectiveness research based on comparisons of leadership style with success records, suggest at least two things. First, successful coaches can exhibit different degrees of task oriented and/or people oriented leadership styles depending on the situational determinants; and second, coaches at one competitive level may not be as successful in another level if they cannot adapt to the new situation.

Waiters (1984), currently Canada's national soccer team head coach, agrees on the importance of coach adaptability in his recent and definitive book entitled "Coaching To Win":

> Inflexible people with inflexible plans are a hazard in almost any circumstance, but so are the off-the-cuff, laid back characters. The answer, very clearly, lies in striking a happy medium - thorough preparation but with an awareness and a preparedness to change when conditions change. (Waiters, 1984, 263)

However, while recommending flexible and adaptable leadership styles for leaders in any circumstance may be somewhat helpful, such advice stems from research in sport, business, and elsewhere that has focused only on successful outcomes e.g. winning, production, material achievement, military conquests, party power, and coaching records. It is clearly evident that the influence these different styles have had, for better or worse, on the physical and especially psychological well-being of followers has been ignored.

In light of the above the basic premise in the present study is that merely achieving goals and/or being successful are incomplete determinants of effectiveness in coaching or any other field of leadership. Success only deals with how a group behaves, while effectiveness describes the internal state or predisposition of an individual or group which is attitudinal in nature (Bass, 1960). As Bliss (1984) and Fuoss and Troppman (1981) have pointed out in business and sport settings respectively, success only connotes efficiency - which means 'doing things right'; effectiveness, on the other hand, connotes something more than efficiency and means 'doing the right things'.

Success also focuses primarily on end results that are not always completely controlled by leaders (they are subject to both luck and chance) and subsequently can be regarded as a short term, brief, and impermanent condition. Effectiveness on the other hand, focuses more on the whole process which includes end results but with a particular emphasis on the attitudes, beliefs, values, and motivational nature of followers. Effectiveness therefore, must be considered a longer term disposition, character, or condition belonging to an individual or group that transcends achievement levels and objective measures of success and failure.

One definition of effective leadership that affirms the importance of psychological effects of leaders on followers, and specifically their internal motivational state, comes from a military and political leader:

> Effective leadership was the ability to get a person to do what you want him to do, when you want it done, in a way you want it done - because he wants to do it. (Dwight D. Eisenhower, in Fuoss and Troppman, 1981, 273)

The above indirectly refers to the paradox in coaching or any leadership situation i.e. that coaches work with athletes to instill and effect self-determining and self-reliant attitudes and motivations so that eventually (and ideally) athletes need neither depend nor rely on extrinsic means (coaches) to compete or participate further in sport. A similar description of how good leaders affect their followers was made more explicit by Lao Tzu:

> The best of all leaders is the one who helps people so that, eventually they don't need him. When he is finished with his work, the people say, "it happened naturally". (in Maccoby, 1981, preface)

Similar desirable motivational dispositions of followers or subordinates have been reported in the classroom (e.g. Flanders, 1967), in business and industry (e.g. Argyle, 1972) and in sport settings (e.g. Alderman, 1978) which are directly attributable to effective leadership in teaching, management, and coaching respectively. Particularly pertinent to this study's focus on soccer coaching is Hughes' (1980) excellent text which is used as the Canadian Soccer Association's technical manual for Level 4 coaches. This book emphasizes the psychological benefits inherent in effective soccer coaching without reference to success or other popular end results more commonly associated with coaching. The focus for soccer coaches, according to Hughes, should be on attitudes:

> Effective coaching and learning.....is very much bound up with establishing correct attitudes, correct habits, and correct movements. First in order of importance is the attitude towards learning by both the coach and the player. This attitude should be characterized by two qualities - an open mind and an enquiring mind.
> (Hughes, 1980, 16-17)

Although many individuals may pass off the inferences which have been suggested as "psycho-babble" or "too humanistically ideal" this will depend on how leadership effectiveness is defined i.e. in terms of winning contests or promoting close human relationships (Cratty, 1981). The position in both this review and study however, is that success (i.e. winning, achieving, attaining goals etc.) is only part of effective leadership - coaches do not just coach skills they coach lives, and so the psychological as well as physical well being of athletes should remain uppermost in their coaching philosophies and ideals, and be reflected in their coaching behavior.

In support of the argument presented so far on what constitutes effective coaching, a summary of the extensive work of Maccoby (1976, 1981) in business management settings

seems appropriate. Maccoby closely studied the types of successful executives, managers, or leaders that were regarded as effective by both peers and subordinates. Each of the four different business manager types he described are characterized briefly as follows: *the Craftsman* 'lives for quality', is independent, thorough and exacting but also uncooperative and inflexible; *the Jungle Fighter* loves 'power', is brave and protective but is ruthless and dominating; *the Company Man* embodies 'service', is loyal, prudent and caring but is servile, fearful and soft; and fourth *the Gamesman* loves competition, takes risks, is daring and dramatic but is rash, gambles too much, is manipulative, seductive, unfeeling and unprincipled. Each character type, according to Maccoby displays negative traits of an unproductive and passive adaptation to new organizations and technology. The three negative traits identified by Maccoby are characterized by managers who are first of all alienated, detached, and disloyal to superiors and subordinates; second, self indulgent, undisciplined and escapist in their attitude to entertainment and self fulfillment; and third, cynical and rebellious with an attitude of getting as much as one can by giving as little as possible which is rationalized in terms of their rights and entitlements over others. Maccoby's concern therefore, is that if one is to develop significant and effective leadership a better understanding and appreciation of the social character of modern groups is warranted.

The social character of any group explains how its values, clusters of traits, and dominant attitudes exist amongst groups of people, which are shared by individual group members, classes, cultures or nations. According to Maccoby, the positive attributes present in groups today will remain dormant or latent because the four types of leaders, described above, neither understand nor embody this social character. Consequently, the opportunity for effective leadership and also for realizing the potential in any work group is lost. On the other hand, if leaders demonstrate specific humanistic qualities, effective leadership will likely prevail. The leader qualities Maccoby describes which correspond to the most desirable characteristics of the 'new' social character of groups are; first, a caring, respectful and responsible attitude; second, a flexible and adaptable approach to people and organizational

structure; and finally a participative approach to decision-making and willingness to share power. These leaders, according to Maccoby are also self-aware, conscious of their weaknesses as well as strengths, and are concerned with self-development for themselves as well as others. Maccoby makes the following important point with respect to successful leadership:

> .....we will all agree that the ideal leader cannot merely be successful. He must bring out the best in people, the constructive ideals of a social character and the values that express its most positive traits. (Maccoby, 1981, 16)

In light of Maccoby's work, especially the significance placed on the the social character of groups, perhaps coaching research should re-evaluate its assumptions concerning the participation motives of both athletes and coaches at different competitive levels. This seems necessary in order to diagnose requirements for effective leadership.

Consistent with this suggestion and Maccoby's concept of social character, the leader/coach model presented by the Canadian Coaching Association's (CAC) National Coaching Certification Program (NCCP) would seem to be appropriate. The NCCP expressly forbids the youth coach to ignore the rights of athletes, their motives/incentives for participation in sport or their physical, developmental and emotional needs (NCCP levels 1-3; Valeriote, 1984). Consequently, the effectiveness of youth coaches is related to how closely they follow NCCP prescriptions of an educational/developmental model of coaching leadership where success is only regarded as a by-product of the coaching process and not the primary aim or objective. On moral and ethical grounds alone, and not withstanding the evidence on youth coaching research (e.g. Martens, 1978; Magill et al, 1982) the direction given by the NCCP would appear to be just, specifically because of the nature and 'social character' of children's and youth sport groups. The primary traits or dominant values of these athletes undoubtedly react positively to leadership figures who encourage and foster fairness, fun, enjoyment, warm and friendly relationships but who also provide opportunities to improve, achieve, excel, and be self-directed. However, if the concept of 'social character' can rationalize the appropriateness

and subsequent effectiveness of coaching roles in youth sports, the concept's implications on how effective coaches operate at elite and adult levels of sport are entirely different.

Through a natural self-selection process or by socialization forces within sport, the social character of elite athletes (especially adult elite athletes) is radically transformed from a naive, sport-for-all, egalitarian and recreational approach towards sport participation, to something akin to survival of the fittest. The traits and dominant values apparent amongst elite performers include high levels of competitiveness, desire, commitment, sacrifice, and ruthless ambition to be the best. Elite level coaches therefore, who ignore the difference in this social character are neither likely to be effective nor succeed. There is already evidence to suggest that effective youth coaching styles are inappropriate at elite adult levels of coaching (e.g. Massimo, 1978; Case, 1984; Smith et al, 1979; Smith, 1979). The 'ends only' approach to sport of both elite athletes and coaches engaged in the pursuit of excellence and the linear record, develops naturally through the zero-sum nature of athletic contexts in which winners only can succeed and losers do not. Some anecdotal accounts of the exploits of certain successful coaches (e.g. Blount jnr, 1974) have illustrated the dubious methodologies that have been adopted under such circumstances which can certainly not be described as either educational or humanistic but which were considered effective nonetheless because of resultant successes.

It would seem therefore, that to be successful and/or effective in elite levels of coaching the coach should take heed of the advice implicit in Maccoby's work, so that the coaching styles adopted are not only appealing to athletes but also facilitate and enhance performances. It will be interesting at the completion of this study to predict the characteristics and traits of effective Intercollegiate soccer coaches from the behavior and decision style preferences of athletes. However a reasonable hypothesis (based on personal knowledge and coaching expertise in soccer) would be that the social character of elite amateur soccer players *obliges* coaches to exhibit considerably more firm, direct and autocratic coaching methods than coaching theory programs might wish to promote!

The approach in this study indirectly taps the social character of inter-collegiate soccer teams by asking for their preferences for and perceptions of coaching behavior. The effectiveness of coaches is consequently regarded as a function of the contrast (congruency/discrepancy) between athlete preferences for and perceptions of behavior and how coaches report their own behavior. An assumption in the study is that effectiveness in coaching will increase as the discrepancy between coach reported behavior and athlete preferences for coach behavior decreases. This approach follows the prescriptions of the Multidimensional Model of Leadership described earlier, and is similar to the approach adopted recently by Canada's National Men's Basketball Team prior to the 1983 World Student Games and 1984 Olympic Games.

On the advice given by the team's sport psychologist Dr. Cal Botterill, Head coach Jack Donohue asked the players to describe the behavior they would prefer of him and the rest of the coaching staff both at practice and in competition. Donohue's innovative approach was an attempt to muster all the motivational resources available that could optimize performances at this elite level and it was both effective and successful - the National Team never before achieved similar success nor has Canada ever enjoyed as much recognition at either the World Students Games (gold medal) or the Olympic Games (fourth place). Donohue's approach was considerate of athlete motivations, desires, and preferences, and, in Maccoby's terms, the social character of the group.

As an effective coaching tool Donohue's approach, used advisedly by a sport psychologist, clearly contributed to the group's success measured in more traditional and objective terms. It also represents a significant insight into effective leadership that might also be measured in subjective terms e.g. in levels of athlete satisfaction with their coach. The final section of this review focuses on similar subjective measures of coaching (leadership) effectiveness and specifically indices of satisfaction that are drawn from studies in both business and industry, and sport.

H. SUBORDINATE/ATHLETE SATISFACTION

The study of worker and/or job satisfaction originated in business settings because of a strong conviction that happy workers are productive workers. The early business studies were able to relate dissatisfaction to absenteeism and turnover both of which are very costly to organizations. The subsequent interest in job satisfaction in business settings, therefore, stemmed from practical and economic reasons since satisfaction could influence organizational effectiveness. The study of job satisfaction has, however, changed and organizational psychologists now investigate job satisfaction because they are interested in finding its causes (Lawler, 1973). This new approach is consistent with the increased prominence of humanistic psychology in management science, where the emphasis is more on human affective experience.

The recent focus on causes or consequences of satisfaction by psychologists interested in work organizations, has significantly advanced the knowledge of practical implications which previous studies that related satisfaction to theories failed to do. For example, according to Drive Theory (e.g. Hull, 1952) satisfaction and cessation of behavior are due to the satiation of primary drives. Maslow (1954) on the other hand, viewed the term 'satisfaction' as a psychological feeling of contentedness, rather than physiological satiation. However both Hull and Maslow assume that need satisfaction is important because it influences need strength neither have explained the causes of satisfaction. Their concepts of satisfaction lack clear definition and in essence all they explain is that the more people obtain of what they want, the more satisfied they will be.

Fulfillment theorists (e.g. Schaffer, 1953; Vroom, 1964) view satisfaction as depending on how much of a given outcome or group of outcomes a person receives. Using this approach, satisfaction is measured by simply asking how much of a given facet or outcome individuals receive. Unfortunately, Fulfillment theory fails to take into account differences in people's feelings about what outcomes they should receive.

Discrepancy theorists (e.g. Katzell, 1964; Locke, 1969) maintain that satisfaction can be determined by the differences between the actual outcomes a person receives and some other

outcome level e.g. what individuals want, or what individuals feel they should receive, or what they expect to receive. According to this theoretical approach, when the actual received outcome is less than the other outcome level, dissatisfaction results. Equity theory is often viewed as an extension of discrepancy theory (e.g. Walster et al, 1973) and emphasizes the importance of an input-outcome balance in determining satisfaction/dissatisfaction. However, while Discrepancy theory does not explicitly explain how individuals perceive the balance between what they get and what they should get, Equity theory argues that the fairness of the input-outcome balance is based on perceptions of the input-outcome balance of a 'comparison-other'. This emphasis does not enter into either Discrepancy theory or Fulfillment theory as they are usually stated.

Finally, Herzberg's (1966) Two-Factor Theory maintains that satisfaction and dissatisfaction do not exist on a single continuum running from satisfaction through neutral to dissatisfaction; and second, that separate and different job facets influence feelings of satisfaction and dissatisfaction. In other words, according to Two-Factor Theory, an individual can, at the same time, be very satisfied and very dissatisfied, but the only way satisfaction can be increased is by effecting changes in those factors identified by Herzberg et al (1959) (e.g. recognition, responsibility, advancement, achievement) that contribute primarily to satisfaction. However, although this theory suggests the kinds of experiences that might lead to a strong motivation to perform effectively, it contains little explanation of why outcomes are attractive to workers. Contrary to popular belief therefore, Two-Factor Theory is not really a theory of motivation. It is really a theory primarily concerned with explaining the determinants of job satisfaction and dissatisfaction.

Taking the strengths of both Discrepancy and Equity theory, Lawler (1973) has proposed a model of Facet satisfaction which focuses more on determinants of satisfaction with any facet of the job. Essentially this is a discrepancy approach and Lawler feels that satisfaction is the difference between what individuals feel they should receive and what they perceive they actually receive. Overall job satisfaction therefore, is determined by the difference

between all the things individuals feel they should receive (from facets of the job) and all the things individuals actually receive. According to Lawler, any approach to thinking about satisfaction and the determinants of satisfaction must consider two relationships. These are the relationship between satisfaction and the characteristics of the job; and second, the relationship between satisfaction and the characteristics of the person. Consistent with this approach therefore, Lawler's model maintains that satisfaction is a function of both the person and the environment. In Lawler's words:

> Personal factors influence what people feel they should receive and....job conditions influence both what people perceive they actually receive and what people perceive they should receive. (Lawler, 1973, 82)

In regard to the relationship between satisfaction and outcomes or performance, Lawler maintains that performance probably causes satisfaction rather than vice-versa, and this relationship can be explained as follows:

> If we assume that rewards cause satisfaction and that in some cases performance produces rewards, then it is possible that the relationship found between satisfaction and performance comes about through the action of a third variable - *rewards*. Briefly stated, good performance may lead to rewards, which in turn lead to satisfaction; this formulation then would say that satisfaction rather than causing performance, as was previously assumed, is caused by it.
> (Lawler and Porter, 1967, 27)

In light of the current study it would be interesting to determine if only successful athletes (athletes on winning teams with the highest won-loss percentage records) report the highest levels of satisfaction; and also, if athletes on losing teams can still report levels of satisfaction with their performance, their coach, and their general involvement with the team, in spite of poor team success.

Certainly the role of the coach in eliciting a quality group performance is an important one and in leadership research Hollander (1978) has maintained that successful outcomes and performances for a group depend upon leadership in four major ways. First, by defining what is sought by the group in terms of setting goals and clarifying objectives; second, by finding the means through training and instruction to go after these objectives; third, giving feedback and evaluating attempts at attaining these goals; and fourth, involving the group and updating the group on how things are going. The degree to which the leader achieves all four demands in his function as a facilitator of group performance will determine his effectiveness in the opinion of group members. Before elaborating further on these and other dimensions of satisfaction that have been included in analyses of leadership effectiveness, the development and utility of a Sport Satisfaction Inventory (SSI) is presented.

Whittall and Orlick (1978) developed the SSI in response to perceived needs and research interests in three factors. First, the social relevance of sport satisfaction; second, the inadequate number of appropriate sport satisfaction measurement alternatives; and third, the limitations of existing sport satisfaction instruments. Also,

> ....the humanistic significance of the concept (satisfaction in sport) is apparent in terms of its relationship with mental health as well as its possible links to the quality and quantity of human performance. (Whittall and Orlick, 1978, 144)

Their instrument includes seven sources or dimensions of sport satisfaction - satisfaction with the sport/game, practice, coach, team, opposition, personal ability/performance, and officials - each of which is correlated with all other dimensions. Whittall and Orlick concluded that the SSI reflects the meaningful feelings and expressions of athletes and that the instrument's strong internal consistency suggests stability over time. They recommend however, that

> ....the dimensionality of sport satisfaction requires additional research and the establishment of the most accurate, exhaustive and useful dimensions is the

> necessary first step required for a sound sport satisfaction literature base. (Whittall and Orlick, 1978, 153)

It is unfortunate that the SSI has not received further attention but the present study, which also focuses on seven dimensions of satisfaction - satisfaction with personal and team performance, coaching expertise and interpersonal skills, role clarity, role acceptance and satisfaction with team involvement - might add to the research on establishing 'useful dimensions of satisfaction in sport'. Other than using different dimensions to measure satisfaction, the approach in this study is very similar to that used by Whittall and Orlick with the SSI. Verifying how closely related each of the above satisfaction dimensions is with other dimensions may be revealing. Also, some conclusions on using and adapting the Personal Opinion Inventory from this study, in sport specific populations, may be possible.

Compiling a comprehensive list of sources of satisfaction in athletics to analyse and measure coaching effectiveness would demand an elaborate investigation in itself. However, the seven facets or dimensions of satisfaction used in the present study are representative of satisfaction measures in research that has focused on both leadership and organizational effectiveness. Their inclusion in a study of coaching effectiveness is rationalized in the following paragraphs with reference to research from both organizational and athletic contexts.

Consistent with the important role leaders have in eliciting outcomes, as described earlier (Hollander, 1978), the perceptions of satisfaction with both personal and team performance are regarded as meaningful measures of effective coaching in themselves. In a recent study of leadership and satisfaction that also examined satisfaction with performance factors however, Chelladurai (1984) pointed out that the most significant athlete response is the individual's perception of personal and team performance relative to what was expected. As Chelladurai explains:

> ....success and failure do not exist as absolute events. They are contingent upon the perception of goal attainment and, therefore, must be considered a psychological

> state. ....Thus, the degree of satisfaction expressed by athletes in relation to their performance and that of the team taps the degree to which performance reached or failed to reach expected levels. (Chelladurai, 1984, 31)

In concluding his study, Chelladurai commented on the inescapable necessity to include objective won-loss records of actual performance,

> ....even though this study was based on the premise that participation in athletics and satisfaction with such participation are of value in themselves without reference to any external measures of success and failure, it is important that additional research must be undertaken to relate the leadership variables and the satisfaction measures to some objective measures of actual performance. (Chelladurai, 1984, 40)

In regard to performance factors therefore, the present study has accommodated the above propositions and asked athletes how satisfied they were with both their own and their team's performance *and* in relation to their expectations, and also included their team's won-loss record over a season.

The significance of athlete satisfaction combined with both coaching expertise and the coach's social skills has already been highlighted in business research on leadership effectiveness (e.g. Hollander, 1978; Ogilvy, 1963). Herzberg (1966) for example, has suggested that satisfaction with leaders could be interpreted as satisfaction with both technical and interpersonal leadership. In sport settings, both Worthington (1978) and Tinning (1982) isolated these two dimensions and emphasized the primary role of coaches to be teaching and improving the technical skills of athletes. The implications however, from other studies on 'friendship' patterns between soccer players (e.g. Yaffe, 1974) and cohesion in interactive dependent sports like soccer would suggest that a coach's social skills might be more important in eliciting and enhancing both performance and athlete satisfaction. Consistent with this research and research in business however, Cratty (1981) noted the importance of *both* technical competence and social skills in coaching.

> It is highly desirable ..... for a coach to possess adequate to good social skills, including real feelings for his or her athletes, in addition to technical knowledge of the sport. More and more at higher levels of coaching expertise, the coach who has both technical skills and an understanding of human relationships is emerging in many individual and team sports. (Cratty, 1981, 277)

The four facets or dimensions of athlete satisfaction that have been described so far are satisfaction with personal and team performance, and the coach's expertise and social skills. The three remaining satisfaction dimensions are athlete satisfaction with role clarity, role acceptance, and overall team involvement.

In business settings Korman (1971) has stressed the importance of clarifying job roles and behavior for workers in efforts to enhance performance and job productivity. However, as Korman pointed out:

> ....despite what would seem to be the obvious conclusion that a person cannot perform successfully on a job unless he accurately perceives the behavior that is required of him, it has only been recently that psychologists have begun investigating the conditions which facilitate such accurate perceptions of role requirements. (Korman, 1971, 79)

A review of subsequent studies has led Ivancevich and Donnelly (1974) and Harris and Harvey (1974) to conclude that greater role clarity in business settings is related to less anxiety and ambiguity amongst workers, less physical stress, less propensity to leave organizations, more job interest, more opportunity for job innovation, more self actualization, more autonomy and more esteem satisfaction.

Studies in sport settings have similarly alluded to the important role of coaches in structuring the athletic environment for athletes (e.g. Chelladurai, 1978), and also the need for clarifying the roles and duties of both coaches and athletes that should be understood by subordinates (e.g. Schriesheim, 1980) and all team members (e.g. Silletta, 1983). In a study of task and social cohesion in hockey teams Grand (1982), like Korman (1971), included considerations of role acceptance as well as role clarity. Grand regarded role clarity as the

degree to which athletes understood their role and what was expected of them as team members. Role acceptance, on the other hand, reflected the extent to which athletes accepted their role(s) within the team. While the latter clearly taps 'accepting' on the part of the athlete and is essentially attitudinal, comprehension and understanding of roles involves 'knowing' and signifies cognitive activity. The degree to which coaches clarify roles for athletes therefore, and the resultant indices of acceptance by athletes of these roles, would seem to be both promising and potent facets of athlete satisfaction in analyses of coaching effectiveness.

Finally, the focus on athlete satisfaction with general and overall team involvement reflects the degree of democratic coaching behavior and participative decision-making present in the coaching environment. The inclusion of athletes in the decisions made related to competition, training and daily team affairs, is a recommended strategy for coaches wishing to sustain athlete motivation in the long term (e.g. NCCP Level 3 Theory). Also, by allowing athletes access to information on the coaching process, e.g. methodological reasons behind training routines, tactics, and decisions regarding seasonal planning, coaches can sustain persistence and enhance intrinsic motivation (Duquin, 1978). Athletes who perceive or feel themselves to be a part of the coaching process and included also in non-sport related team business (e.g. social affairs) are therefore, more likely to report satisfaction with their general team involvement.

The importance of feeling part of the team has been alluded to in studies of athlete compatibility. In both Carron and Bennett (1977) and Carron (1978) coach-athlete personal interactions were tapped using a model espoused by Schutz (1966) and Schutz's questionnaire - the Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B). Briefly stated, Schutz's basic premise is that 'people need people' but Schutz elaborates on the word 'need' as reflecting three different feelings within interpersonal relationships. These are first a control dimension - the need to either control or be controlled and to be free or extend freedom to others; second, an affection dimension - the need to receive or dispense affection, love, and caring to others; and third, an inclusion dimension - the degree to which either the 'sender' or

'receiver' needs to accept or reject socialization, association, communication, and companionship with others (according to Schutz without inclusion behavior there is no interpersonal relationship). These three dimensions include both the need to receive these components of interpersonal behaviors and the need to express these dimensions to others. Schutz also points out that an individual may only wish to be a receiver or a sender, or may wish that an interchange of the behavior (e.g. inclusion) takes place (Carron, 1980).

The model proposes that a compatible duo consists of two individuals whose needs are mutually complementary. For example, a coach who needs to control, does not need to express affection and does not need to relate interpersonally to athletes would be described as compatible with an athlete who needs to be controlled, does not need to receive affection and does not want to interact socially with the coach. In their study using FIRO-B, Carron and Bennett (1977) first identified thirty-six of fifty-four athlete-coaching pairs believed compatible by the coaches involved. Following Schutz's assumptions they found that the needs systems of both coaches and athletes were important to consider. Most importantly however, they found that a predominant factor was the inclusion dimension. It was observed that the most incompatible dyads were marked by isolated and withdrawn behaviors by both the athlete and the coach.

> ....the interpersonal relationship within incompatible coach-athlete dyads was characterized by relatively detached, withdrawn, isolated behavior on the part of both the coach and the athlete. (Carron and Bennett, 1977, 677)

From this evidence on the compatibility of coach-athlete dyads, it is reasonable to assume that athlete perceptions and measures of inclusion or general involvement with the team would contribute significantly in analyses of coaching effectiveness. Athlete satisfaction with the amount of personal input and participation in general team affairs is consequently regarded as an important indice of athlete perceptions of overall coaching effectiveness.

In the final section of this review the specific hypotheses that are extracted directly from previous sections, are outlined and enumerated with respect to the current study.

I. STUDY HYPOTHESES GENERATED FROM THE LITERATURE

The following hypotheses originating from previous research in both sport and business settings, can be tested in the current study.

1-1. Coaching effectiveness (athlete satisfaction) measured by the Personal Opinion Inventory (POI), is a function of the congruence between Coach Intended and Athlete Preferred behavior.

1-2. Coaching effectiveness is also a function of the congruence between the Coach's Perceived decision-making styles and Athlete Preferences for decision styles.

1-3. Athlete satisfaction with both individual and team performance is a function of the congruence between Coach Intended and Athlete Preferred behavior.

1-4. Higher levels of actual performance success perceived by athletes is related to athlete satisfaction with coaching expertise.

1-5. Intercollegiate soccer players prefer more Training behavior, Autocratic behavior and Rewarding behavior than other categories of coaching behavior.

All of the above stem from Chelladurai's (1978) work on the Multidimensional Model of Leadership in Athletics and the Normative Model of Decision-Making in Coaching (Chelladurai and Haggerty, 1978).

2. Training and instruction behavior of coaches is related to overall athlete satisfaction and especially satisfaction with role clarity and personal performance (Schreisheim, 1980).

3. Greater role clarity is related to athlete satisfaction with personal performance and general team involvement (Ivancevich et al, 1972).

4. Athletes prefer coaches who display Training behavior and Rewarding behavior 'often', Democratic behavior and Social Support behavior 'occasionally', and Autocratic behavior 'seldom' (Terry, 1984; Terry and Howe, 1984).

5. Athletes on winning and losing teams (i.e. teams with the highest and lowest won-loss percentage records) report the highest and lowest levels of overall satisfaction respectively (Lawler and Porter, 1967).

6. All seven dimensions of athlete satisfaction intercorrelate (Whittall and Orlick, 1978).

7. Satisfaction with personal and team performance is highly related to objective measures (won-loss data) of actual performance (Chelladurai, 1984).

8. Perception of athlete involvement ('inclusion') contributes significantly to evaluations of overall coaching effectiveness and is itself an important satisfaction dimension (Carron and Bennett, 1977).

9. Greater satisfaction in decision-making is related to greater levels of athlete satisfaction (Locke and Schweiger, 1979).

10. Intercollegiate soccer players generally prefer their coaches to make decisions on behalf of their team. (Yukl, 1971; Mulder, in Brandstatter et al, 1978).

11. Athlete satisfaction is related mostly to congruence in athlete preference/perceptions of Training behavior and Rewarding behavior (Chelladurai, 1984).

12. The social character of Intercollegiate soccer players, revealed in athlete preferences for both coaching behavior and coaching decisions, compels coaches to be predominantly firm, direct, and autocratic (based on Maccoby, 1976, 1981).

Chapter III

METHODS AND PROCEDURES

A. SAMPLE

All coaches of men's teams and their athletes targeted for this study were participants in the 1982-83 Canadian Intercollegiate Athletic Union (CIAU) soccer season. All athletes had to be regarded as starting players by their head coaches who were held responsible for their team's participation and commitment to the study, and for the administration and return of the study questionnaires at the completion of the season.

B. DATA COLLECTION PROCEDURE

Prior to the opening games in the 1982-83 CIAU soccer season all head coaches were sent a letter informing them of the purposes and intent of the study. The letter requested each team's participation and commitment to the investigation and was accompanied by study endorsements from the Canadian Soccer Association (CSA). Declining coaches were asked to inform the researcher immediately if they did not want to receive the study questionnaires which would follow some weeks later. Since only two refusals were returned in the stamped-addressed envelopes provided prior to the second mailing, responses were initially anticipated from twenty-eight teams.

Each team received a mailed package containing explicit instructions for each coach who subsequently administered four questionnaires to each of his starting players at the completion of the CIAU season. A maximum of fifteen players per team was allowed. The coach was also asked to complete three questionnaires.

The second mailing was sent out in time to coincide with the final week of regular league or conference play nationwide.

C. STUDY QUESTIONNAIRES

Using a Coach Information Sheet (Appendix A) coaches reported aspects of their coaching experience and background and their team's 1982-83 record. Conference won-loss records had to be confirmed later by CIAU officials due to innaccurate coach data. Later, through personal communication with the CSA, each coach's certification level was also obtained.

The Decision Styles Inventory (DSI), given to both coaches and their athletes, consisted of fifteen different soccer cases or situations in which coaches had to make a decision (Appendices B and C). Each of the fifteen cases was comprised of the presence or absence of seven soccer attributes representing the same conditions as outlined in Chelladurai and Haggerty's (1978) model (see Figure 1). The seven problem attributes are defined in soccer terms in Table 3.

Both the attributes and all fifteen cases, compiled by the researcher, were initially submitted for comment and approval to the Technical Directors of the CSA and the Ontario Soccer Association (OSA). Subsequent to their observations and commendations, the attributes and cases were pilot-tested amongst undergraduate Sport Psychology and Advanced Soccer classes at the University of Alberta. Face validity of this instrument therefore, but not reliability, was established.

The DSI asked the coaches to indicate which decision-making style - autocratic, consultative, participative or delegative - they would use in each particular soccer situation or case, and also which decision style they felt other CIAU coaches would normally use. The latter responses were used to create a sport specific Normative Decision Style Model which was subsequently compared and contrasted with Chelladurai and Haggerty's (1978) theoretical model. Athletes meanwhile, were asked to indicate which decision styles they preferred their coach to use in each of the same fifteen situations and which decision styles they thought (or could predict) their coach would use. Four quite different response perspectives were therefore identifiable and subsequently contrasted per team using the DSI. The four different

Table 3

Seven Soccer Attributes

Restrictive Time Pressure	situations in a game, during competition, where time factors are critical.
Quality Requirement	anything to do with team selection, practice or training schedules.
Coach has High Relative Information	who knows more in the situation--coach or player(s)?
Problem Complexity	deciding team tactics for the next game(s).
Group Acceptance	players often need to feel comfortable with what they are being asked to do, therefore their prior acceptance, (e.g. to playing offside,) is critical if these team tactics are to be successful.
Coach has Power Base	recently appointed coaches to well established teams very often begin with reduced power base as compared to, perhaps, senior players. This is a coach versus player situation.
Group Integration	this refers to the cohesiveness and togetherness of the team members whose inter-personal relationships are key determinants of group integration. This also relates to the homogeneity of the team's goals and objectives.

perspectives or response sets were termed Coach Intended, Coach Normal, Athlete Preferred and Athlete Perceived.

The Leadership Scale for Sport (LSS) was administered in it's three forms - one form for coaches (Appendix D); two other forms for athletes (Appendices E and F) - to establish three different perspectives on coaching behavior. These perspectives were also termed Coach Intended, Athlete Preferred and Athlete Perceived and were also compared and contrasted by team and across all teams.

Athletes and coaches were asked to indicate, on a five point Likert type scale, the degree to which they agreed with each of the forty questions on aspects of coaching behavior. The data was first grouped according to the five behavior categories representing Training behavior, Autocratic behavior, Democratic behavior, Social Support behavior and Rewarding behavior (defined in chapter one) - and then compared item by item using various statistical procedures. The validity and reliability of this instrument had already been established by Chelladurai and Saleh (1980).

The coaching effectiveness questionnaire, referred to as the player's Personal Opinion Inventory (POI - Appendix G) consisted of measures of athlete satisfaction with behavioral aspects of their coach, and their coaching environment. Only athletes completed this questionnaire which was comprised of thirty-seven items representing seven proposed dimensions of athlete satisfaction. All seven dimensions were previously used independently in similar studies of executive effectiveness in management science and organizational psychology and some have been used recently in sport studies on athlete/coach compatibility and athlete satisfaction. The seven dimensions were: athlete satisfaction with personal performance, team performance, coach expertise and social skills, athlete involvement with the team, athlete role clarity and role acceptance.

In defending the choice of these seven dimensions of satisfaction it can be assumed that CIAU soccer coaches first of all, are undoubtedly under pressure to produce successful results and good performances. Their respective athletic directors do not as a rule rationalize soccer team budgets and programs using arguments of 'fun', 'enjoyment' or 'recreation' - they prefer to have competitive teams. But athletic directors and their coaches are not the only ones who could be described as task and results-oriented in their approach to CIAU soccer. Their players are also interested in results and performances and commit a lot of time and energy to one of the most intensely competitive Intercollegiate competitions in Canada. Therefore, it might be expected that coaches who are significantly instrumental in manufacturing successful soccer performances are more likely to be described as 'effective coaches' if their own athletes regard

both personal and team performances in a positive way. Furthermore, athletes whose personal and team performance expectations are met at least partially over the season are more likely to view their coach's performance favorably.

Athlete satisfaction with leadership actions emitted by coaches also contributes to performance satisfaction. More specifically, task related preferences for leadership lead to athlete satisfaction with the coach's technical expertise. Similarly, interpersonal preferences of athletes lead to satisfaction with an interpersonal leadership coaching style. Satisfaction with technical leadership therefore, is directly related to athlete perceptions of the coach's level of performance, and while satisfaction with interpersonal leadership related to performance is tenuous it has been related in previous studies if athletes perceive the coach as task oriented (e.g. Chelladurai, 1978).

Clear, understandable and acceptable goals and objectives in business settings reduce anxiety and ambiguity amongst groups of workers (e.g. Harris and Harvey, 1974). Evidently when work groups lack structure and direction group members experience stress which drains productive energy. Lack of productivity eventually creates dissatisfaction within the group which may lead to a breakdown of the entire group. Athletes in this study therefore, who understand their role in the team and know exactly what is expected of them as team members, are more likely to be effective performers. Athletes who also accept their role within the team structure, as it is clarified for them by their coach, are also more likely to be satisfied with themselves and consequently more effective players in general.

Finally, CIAU soccer athletes who experience success or failure measured in performance terms and results, also feel different levels of satisfaction with the experience of participating or being involved in the short life of the group. Satisfying team involvement stems from free expression of feelings, opinions or ideas, and also from the input and contribution each athlete is allowed to make towards team operations. Athletes given such an opportunity to be involved and have input are more likely to rate their coach's effectiveness positively in comparison to athletes who are deprived of this opportunity.

Measures of coaching effectiveness on each of the seven dimensions of athlete satisfaction were obtained using a five point Likert type scale. Individual and team average scores were calculated by collapsing the thirty-seven item scores into their respective satisfaction dimensions. Table 4 illustrates the number of items represented in each satisfaction dimension.

Table 4

Coaching Effectiveness Inventory

# Items Per Category	7 Dimensions Of Athlete Satisfaction With:
2	Personal Performance
2	Team Performance
9	Coach's Expertise
2	Coach's Interpersonal Skills
7	General Team Involvement
9	Role Clarity
6	Role Acceptance
37	

Neither reliability nor validity of this instrument was established. The inventory merely represents a collection of items compiled by the researcher into seven dimensions of athlete satisfaction.

D. STATISTICAL TREATMENT

DESCRIPTIVE STATISTICS. The data were analysed using SPSS. The study sample by team, the number of athletes and the background of coaches are illustrated using descriptive statistics. Similarly team frequencies both for decision styles of coaches and athletes, and team means for coaching behavior and coaching effectiveness are obtained using an SPSS Crosstabs descriptive program.

INFERENTIAL STATISTICS. MIDAS (Michigan Interactive Data Analysis System) was used to calculate dyad scores between coaches and their athletes. It is important to point out that dyad congruence measures were treated as absolute scores or differences and not signed differences. This is because the magnitude but not the direction of differences in perceptions or preferences was considered important to satisfaction. Consistent with Chelladurai's (1984) and Yukl's (1971) approach to discrepancy measurement *athlete satisfaction was proposed to be optimal in conditions of least discrepancy (most congruence)*. Furthermore it was hypothesized that *satisfaction levels would decrease directly as the discrepancy increased (deviations from congruence increased) in either direction.* These congruence scores, converted to team mean scores, were then related to athlete mean scores on coaching effectiveness measures.

As an example of the above, when examining the relationship between congruent decision style choices and coaching effectiveness measures, the MIDAS program creates three variables. Each of the three variables represented mean congruence scores per team on decision styles since mean scores as opposed to individual coach-athlete dyad scores are regarded as more reliable units of analyses. Computation of the variables involved comparing the decision style choices between the coach and his team on all fifteen cases. Coach Intended scores were compared to each of his athletes' scores on each case for both the Athlete Preferred and Perceived forms of the inventory. This calculation created two congruence variables per team. The third variable was derived from comparisons between Athlete Perceived and Athlete Preferred scores. In the case of all three congruence scores signs were ignored. The absolute values were converted to team means, which were subsequently correlated with team mean scores for each of the seven athlete satisfaction dimensions in turn.

Coaching behavior congruence scores per team were created as described above except that item scores in the LSS were collapsed into five behavior categories and then related to coaching effectiveness dimensions.

Correlation matrices measured relationships within and across teams on different forms of the decision style and behavior inventories, and for coaching effectiveness. Newman-Keuls

post-hoc analyses were used in calculating intercorrelations per team on coaching effectiveness. Univariate analysis of variance with pairwise contrasts and Kruskall-Wallis related the five behavior categories and coaching effectiveness dimensions with actual performance data (won-loss data). This analysis made it possible to assess the significance of both behavior and satisfaction mean scores in three won-loss data groups.

Chapter IV

RESULTS AND DISCUSSION

A. SAMPLE

Table 5 lists the total of eighteen CIAU teams that completed and returned all the study questionnaires. Each university is listed in its conference, with its conference standing and won-loss percentage for that season and with the total number of players that participated in the study. Of the eighteen CIAU teams that responded (sixty percent response) only fourteen were used in all the statistical procedures. Four teams, with less than six player responses (less than half a soccer team), were omitted from the analysis involving congruence scores.

During follow up procedures with the twelve non-respondent teams involving two letters and numerous telephone calls to each coach, it appeared that the reasons for non-participation varied. Five of the coaches in the 'unable' category used language difficulties as the only reason for not particicpating (predominantly French speaking universities); two off-campus coaches indicated that the 'considerable inconvenience' to themselves and to their athletes was the reason for their team not participating; one coach claimed that his team's responses were lost in the mail. Two coaches who refused to participate before the questionnaires were sent out did so for personal reasons, and a further two refused because they were suspicious of this type of research and did not like the demands imposed on them personally. Table 6 illustrates the coaching experience, expertise and backgrounds of the coaches included in the study. While one half of the final responses were returned within two weeks of the end of the CIAU season, the last returns were not received for another four months.

The final data sample of the study which consisted of eighteen teams and one hundred and sixty-one athletes was dissappointing, particularly the return of only five of eleven teams from Ontario. However achieving the goal of obtaining returns from at least fifteen athletes from each of thirty teams was perhaps unrealistic given the language difficulties in Quebec and

Table 5

Study Sample By Team And Conference

Conference & Teams (no. of teams in conference)	1982/83 Percentage Points Won (conference standing)	Coach	&	Athletes
*CWUAA (5)				
Victoria	87.5(1)	1		9
Calgary	62.5(2)	1		11
Alberta	43.75(3)	1		15
British Columbia	43.75(4)	1		12
Saskatchewan	6.25(5)	1		13
*OUAA West (7)				
Wilfrid Laurier	87.5(1)	1		10
Western Ontario	54.2(4)	1		2
1 refusal; 4 unable				
*OUAA East (6)				
Toronto	95(1)	1		15
Carleton	70(2)	1		0
Royal Military College	20(5)	1		5
1 refusal; 2 unable				
*QUAA (4)				
McGill	83.53(1)	1		6
Concordia	83.33(2)	1		11
Bishop's	11.11(3)	1		7
1 unable				
*AUAA East (4)				
St. Mary's	80(1)	1		15
St. Francis Xavier	20(3)	1		9
Acadia	10(4)	1		2
1 unable				
*AUAA West (4)				
New Brunswick	75(1)	1		13
Mount Allison	50(3)	1		6
2 refusals				

Totals 18 teams (60% response)
18 coaches; 161 athletes

*Athletic Union Conferences

CWUAA - Canada West
OUAA - Ontario (East and West)
QUAA - Quebec
AUAA - Atlantic Provinces (East and West)

Table 6

Coaches Coaching Experience and Certification Level

Range	Age Range 30-54 yrs	Years Coached in (CIAU) 2-20 yrs	Total Years Coached 2-25 yrs	1982-83 Record 6.3%-95%
Average	40.6 yrs*	7.8 yrs	13.3 yrs	59.9%

*data missing = 1

Canadian Soccer Association Certification Level (1982)

No Certification at all	Level 3 Technical Only	Level 3 'C' License	Level 4 'B' License
8	4	4	2

Ontario, the short duration of the CIAU season, distance factors, and the relative absence of control over administration procedures. Despite this problem of non-involvement, returns were received from each of the six conference title winners including the National Champions that year (McGill), and from two B licence coaches (the top CSA coaching certification level). In general, the CIAU soccer coaching sample was quite experienced both in years of CIAU coaching experience and general soccer coaching experience. There were however some coaches who had relatively little experience and almost half had no CSA coaching certification.

The current lack of experience and credentials of some coaches is surprising and might be cause for concern were it not for the unique dilemma facing CIAU soccer programs. The dilemma is itself caused by a natural phenomenon - the Canadian climate - which only permits a short eight-ten week season (including all playoffs and the National final) which, as a consequence, is not seen as a high profile by Athletic Directors or by the media. CIAU soccer players therefore, are rarely managed by full-time on campus head coaches. It is reasonable to assume however that the growth and popularity of the game at both CIAU and recreation levels (especially womens soccer) in all Canadian universities will continue, so Athletic departments

may shortly be compelled to consider appointments of at least one full-time soccer coach (male or female) in the near future. For the moment however, the presence of a majority of part-time, off campus and (to a less extent) poorly qualified coaches hurts the game and remains a constant concern of the Canadian Intercollegiate Soccer Coaches Association (CISCA) which continually strives to upgrade all standards of CIAU soccer including facilities, officiating, and of course coaching.

B. INSTRUMENTS

PERSONAL OPINION INVENTORY

Indices of coaching effectiveness in the study were measures of athlete satisfaction with aspects of performance, their coach, and the coaching climate on their team. The thirty-seven items of the Personal Opinion Inventory (POI) comprised seven satisfaction dimensions - personal performance, team performance, coach expertise, social skills, team involvement, role clarity and role acceptance.

A principal components factor analysis with oblique promax rotation on the thirty-seven items from all the respondents produced a six factor solution, however the factors which appeared were not interpretable. A further procrustean analysis revealed that the arrangement of the thirty-seven items into seven hypothesized dimensions of athlete satisfaction would not fit statistical assumptions. An item analysis of this inventory however, illustrated that very few items correlated significantly higher with non-dimension items (Appendix H). Only one of the thirty-seven items loaded higher on items from another dimension which strongly supports the decision to treat each of the seven dimensions of athlete satisfaction as independent measures of coaching effectiveness. Although inter-item reliability could be improved, it was decided that ***each of the seven dimensions would be related independently to decision style and behavior congruence scores, and in correlation analysis with coaching behavior.***

The overall means for each of the seven satisfaction dimensions are illustrated in Table 7.

Table 7

Personal Opinion Inventory: Means, Modes And Standard Deviation Scores

Seven Satisfaction Dimensions
(Total Means By Team Sig. Diff. From Grand Mean).

N=161	Personal Perf.	Team Perf.	Coach Exp.	Social Skills	Team Involve.	Role Clarity	Role Accept.
Mean	2.75 (2)	2.95 (8)	3.51 (4)	3.76 (4)	3.55 (1)	3.97 (2)	3.66 (0)
SD	.97	1.07	.66	.85	.70	.72	.87
Mode	2.5	2.5	3.56	4.0	3.86	4.72	4.17
Missing Cases	0	0	1	2	1	0	4

From the descriptive data it is clear that athletes were less satisfied with personal and team performance factors than with the other five satisfaction measures. However, satisfaction with team performance varied considerably as evidenced by the large standard deviation (1.07) and the number of means significantly different from the grand mean (8). This perhaps was to be expected with a won-loss percentage (success) range of 6.3 - 95% for all teams over the season.

When each team's mean was related to other team means for all seven satisfaction dimensions, a total of ninety significant differences were found. Table 8 illustrates however, that well over half of the total significant differences were found in levels of satisfaction with overall team performances where most successful teams with 80+% won-loss records were significantly more satisfied than poorer (less than 30%) and intermediate teams (31 - 75%). This finding supports the hypothesis of Chelladurai (1984) that athlete satisfaction with personal and team performance is highly related to objective measures (won-loss data) of actual performance.

Table 8

Total Significant Mean Differences (By Team) From Seven Satisfaction Dimensions By Won/Loss Grouping

Seven Satisfaction Dimension	Won/Loss Grouping 1 (<30%)	2 (31-75%)	3 (80%+)	Total
Personal Performance	8			8
Team Performance	6	12	34	52
Coach Expertise	15	4	5	24
Social Skills	4		1	5
Team Involvement				
Role Clarity	1			1
Role Acceptance				
			Total	90

The most interesting feature of Table 8 however, is the indication that some losing teams differed significantly from winning teams in their levels of satisfaction with personal and team performance, coach expertise, social skills and role clarity. As an example, some least successful teams were significantly more satisfied than successful teams in their satisfaction with personal performance i.e. specifically eight team means in this satisfaction category, belonging to least successful teams, were significantly higher than team means belonging to more successful teams. This indicates that CIAU soccer players are still able to obtain acceptable levels of personal and team performance satisfaction from competent and personable coaches in spite of their lack of competitive success. Such evidence perhaps suggests that players perceive their athletic world realistically in terms of both personal and team limitations in CIAU competition and does not lend support to the hypothesis that winning and losing

teams automatically report highest and lowest levels of overall satisfaction respectively, as suggested by Lawler and Porter (1967). Perhaps more importantly however, these athletes may recognize and appreciate good coaching regardless of results, and still seek positive experiences from participation and involvement in university soccer.

The correlation matrix in Table 9 illustrates the close inter-relationship of the seven satisfaction measures which is consistent with the hypothesis from Whittall and Orlick (1978) that all the dimensions of satisfaction would be intercorrelated.

Table 9

Intercorrelations Of Satisfaction Dimensions
(Total By Team)

Athlete Satisfaction Dimension	PP	TP	CE	SS	TI	RC	RA
Personal Performance (PP)	1.00						
Team Performance (TP)	.35** (2)	1.00					
Coach Expertise (CE)	.19*	.43** (1)	1.00				
Social Skills (SS)	.14	.19* (3)	.45** (3)	1.00			
Team Involvement (T1)	.44** (2)	.25** (1)	.53** (4)	.32** (2)	1.00		
Role Clarity (RC)	.21** (2)	.30** (1)	.59** (5)	.34** (2)	.49** (4)	1.00	
Role Acceptance (RA)	.42** (3)	.25**	.44** (2)	.31** (3)	.66** (5)	.67** (8)	1.00

*p<.05
**p<.01

Only one correlation - satisfaction with social skills and personal performance - was not found significant at the .05 level, but it was positive and significant at the .08 level. The evidence suggests that although these seven dimensions, that have been used in previous research, did not factor out they do appear to be valid measures of athlete satisfaction independent of, but related to, each other. Second, in relation to performance, allowing more

athlete involvement, having a competent coach and accepting roles in the team would seem to enhance and facilitate satisfaction with both personal and team performance. Third, in regard to athlete perceptions of coaching expertise the most important factors would seem to be an ability to clarify roles, to create an atmosphere for team involvement and commitment to the team, to be warm and friendly towards individuals, and to ensure individual roles are agreed upon and acceptable to individual athletes. Finally, from the most significant correlations overall, the evidence in Table 9 suggests that satisfaction with the athlete roles prescribed in a soccer team is very closely associated with satisfactory clarification of roles and levels of athlete involvement. The latter lends credence to the hypothesis from Carron and Bennett's (1977) study on 'inclusion' and suggests more specifically, that athlete participation and input in general team affairs is related to athlete perceptions of overall coaching effectiveness.

When the total relationships amongst all seven satisfaction measures are examined across all teams in the three won-loss groupings, the evidence supports the above. Table 10 illustrates that successful teams in particular, reported close relationships between levels of satisfaction in coaching expertise and social skills, team involvement and role acceptance. It is noteworthy that most of the relationships in *all* three won-loss categories are not related to performance satisfaction but rather to more psycho-social aspects of coaching effectiveness, i.e. the coaches' ability to coach (coach expertise), coach interpersonal relationships (social skill), the amount of athlete input and involvement in team affairs (team involvement), and the degree to which roles are specifically outlined (role clarity) and acceptable to the athletes (role acceptance).

When comparisons were made between won-loss data and coaching effectiveness, using univariate one-way ANOVA and pairwise contrasts, the athletes in the most successful teams (80+%) reported significantly more satisfaction with their team's overall performance than athletes in the other two groups. A not unexpected result. However, this group also reported significantly more satisfaction with coaching expertise than the intermediate group (31-75%), but not the least successful group (0-30%), suggesting that successful coaching is closely related

Table 10

Total Significant Relationships Between Satisfaction Measures for All Teams by Won-Loss Groupings

Athlete Satisfaction Dimensions	Total Significant Differences by Won-Loss Group																						
	(<30%) N=3							(31-75%) N=5							(>80%) N=6								
	PP	3TP	CE	SS	TI	RC	RA	PP	TP	CE	SS	TI	RC	RA	PP	TP	CE	SS	TI	RC	RA		
Personal Performance (PP)																							
Team Performance (TP)								1							1								
Coach Expertise (CE)									1														
Social Skills (SS)									2	1						1	2						
Team Involvement (TI)		1	1	1				1		2					2		2	1					
Role Clarity (RC)	1	1	2		1							1			1		3	2	2				
Role Acceptance (RA)			1	2	2	1		2				2	4		1		1	1	4	3			

to the ability of the coach to organize, prepare, and instruct the techniques and tactics of the game and motivate players (coaching expertise). According to these data, it seems that the most successful coaches were able to do this, to their athletes' satisfaction, more effectively than did coaches on less successful teams. The presence of a 'halo effect' suggesting that successful results 'cause' greater general levels of athlete satisfaction with everything, is possible, but if this is so why not in all satisfaction dimensions and only in two? (i.e. team performance and coach expertise); and second, why were results only significantly different from intermediate successful teams and not the least successful teams? There appears to be a suggestion here that athletes can and do perceive coaching ability independently from coaching success, that coaching expertise contributes significantly to success, but also that satisfaction with success does not necessarily color perceptions of satisfaction with other coaching effectiveness dimensions.

In summary, data from the Personal Opinion Inventory reveal that this instrument collected measures of seven related aspects of athlete satisfaction. Performance factors in the inventory related closely to both coaching ability and athlete role factors. However, from using different statistical procedures with the data, it is evident that athletes were able to differentiate between each of the seven dimensions and not allow team success to influence their perceptions of coaching expertise and other coaching abilities that help fulfill other athlete needs in soccer. Consequently, although the instrument and its psychometric properties are perhaps not acceptable for scientific surveys of general athlete satisfaction, the seven separate indices that were examined appear to be valid and sufficiently discrete measures of satisfaction in university soccer.

These measures of satisfaction were subsequently used as indices of overall coaching effectiveness and related to preferences for and perceptions of decision styles and coaching behavior.

DECISION STYLES INVENTORY

The most frequently reported (modal) decision styles for each of the fifteen cases in the Decision Styles Inventory are listed in Table 11 in the four different response sets - Coach Intended, Coach Normal, Athlete Preferred and Athlete Perceived.

It is important at this stage to remember two features of the decision-making styles descriptive data. First, Chelladurai and Haggerty's autocratic decision style, by their definition, includes consultation, so if coaches indicated an intention to use the consultative style or suggested that other coaches would use this style, 'autocratic' style was recorded when comparisons were made to styles prescribed by the theoretical model; second, only the Coach Normal response set data is required for comparisons with (and for validating) the Normative Model. The other three response sets are important for other analyses.

When compared generally with the prescribed responses of Chelladurai and Haggerty's (1978) model in the left column in Table 11, the first immediate observation is that neither the coaches nor their athletes appeared to prefer or prescribe delegative styles in any of the fifteen cases. Overall percentages of styles chosen for each response style noted in Table 12 clearly indicate that the delegative decision style was not at all popular. (1.9% of total style choices).

One explanation for this might be the possibility that a delegative style on the part of the coach is difficult to perceive by athletes. For example, athletes may not be aware that someone other than the coach is given the responsibility of making decisions in particular situations. It is also quite likely that without adequate briefing, the respondents in this study may not have comprehended nor fully understood what delegative decision-making actually entailed. The scarcity of 'delegation' preferences of both coaches and athletes and the low score for it on perceived use, suggests at least two things. First, CIAU soccer coaches definitely do not like the idea of having any reponsibility for decision-making passed over to athletes, regardless of the situation; and second, CIAU soccer players are in agreement with this point of view. An intuitive interpretation of this finding is that both CIAU coaches and their athletes realize that coaches, more than athletes, know 'best' about this level of competition and its

Table 11

Modal Style And Frequencies Of Each Decision Style Preference Per Case For Each Response Set

Case No.	Norm. Model Prescriptions	Modal Decision Style in Each Response Set (Actual Frequencies) Coach Intended (18) *(auto, con, part, del)	Coach Normal (17) (auto, con, part, del)	Athlete Preference (161) (auto, con, part, del)	Athlete Perceived (161) (auto, con, part, del)
1	auto	auto (18, 0, 0, 0)	auto (16, 1, 0, 0)	auto (134, 24, 3, 0)	auto (142, 19, 0, 0)
2	del	auto (10, 8, 0, 0)	auto (9, 8, 0, 0)	con (48, 93, 14, 6)	con (63, 80, 11, 7)
3	del	con (0, 16, 2, 0)	con (0, 15, 1, 1)	con (7, 102, 48, 4)	con (27, 115, 18, 1)
4	auto-del	part (2, 5, 11, 0)	part (5, 5, 7, 0)	part (11, 32, 115, 3)	part (29, 47, 84, 1)
5	auto	con (4, 8, 6, 0)	con (4, 8, 5, 0)	part (25, 57, 77, 1)	con (43, 62, 48, 7)
6	part	auto (8, 6, 3, 1)	auto-con (6, 6, 5, 0)	con (20, 67, 63, 10)	con (41, 56, 47, 16)
7	del	con (2, 15, 1, 0)	con (1, 15, 1, 0)	con (3, 119, 36, 3)	con (28, 107, 26, 0)
8	auto	auto (16, 2, 0, 0)	auto (14, 3, 0, 0)	auto (105, 46, 10, 0)	auto (125, 31, 4, 1)
9	auto	auto (15, 2, 1, 0)	auto (14, 2, 1, 0)	auto (84, 51, 26, 0)	auto (102, 39, 18, 2)
10	auto	auto (18, 0, 0, 0)	auto (15, 2, 0, 0)	auto (99, 55, 6, 1)	auto (121, 39, 0, 1)
11	part	con (4, 9, 5, 0)	con (0, 8, 3, 0)	part (23, 66, 69, 3)	part (52, 68, 40, 1)
12	del	con (6, 11, 0, 1)	con (6, 10, 1, 0)	con (41, 79, 35, 6)	con (62, 78, 18, 3)
13	del	auto (10, 8, 0, 0)	auto-con (8, 8, 1, 0)	auto (76, 72, 11, 1)	auto (85, 70, 3, 2)
14	part	con (5, 8, 4, 1)	con (5, 7, 4, 1)	con (47, 81, 27, 4)	con (72, 74, 11, 2)
15	del	con (7, 8, 3, 0)	auto-con (7, 7, 3, 0)	con (29, 64, 60, 6)	con (43, 69, 45, 3)

* autocratic, consultative, participative, delegative

Table 12

Percentage Of Each Decision Style Chosen For Each Response Set

Response Set	% AUTO	% CON	% PART	% DEL
Coach Intended	46.3	33.3	18.5	1.9
Coach Normal	45.5	41.2	12.5	0.8
Coach Total	45.9	37.2	15.6	1.3 (N=18)
Athlete Preferred	31.2	41.9	24.9	2.0
Athlete Perceived	43.0	39.6	15.4	2.0
Athlete Total	37.1	40.7	20.2	2.0 (N=161)
Grand Total	38.0	40.4	19.7	1.9 (N=179)

demands of coaches, teams and players over all situations. Both coaches and athletes therefore feel that the coach should always have the most input into the decisions that need to be made. Furthermore, socialization factors and behavioral norms specific to soccer can add to explanations of these findings. For instance, young and impressionable players eager to please and eager to learn, will readily acknowledge and defer to the significantly important and traditional leadership role of a head soccer coach. It may even be unreasonable to assume that athletes would expect and/or prefer anything else from their soccer coach because traditionally the 'boss' usually commands and directs both team and individual affairs.

A second observation from Table 11 is that each modal response set for both coaches and athletes varied greatly from the Normative Model and as Table 13 illustrates all four response sets in fact differed significantly from the Normative Model but non-significantly

between themselves.

Table 13

Significance OF Differences Between Modal Frequencies
In Decision Styles

Styles	AUTO	PART	DEL	Chi	df	prob
MODEL	6	3	6			
Coach Intended	14	1	-	18	2	p = .001
Coach Normal	14	1	-	18	2	p = .001
Athlete Preferred	12	3	-	12	2	p = .01
Athlete Perceived	13	2	-	14.5	2	p = .001
COACH INTENDED	14	1	-			
Athlete Preferred	12	3	-	4.25	2	p = .80
Athlete Perceived	13	2	-	1.07	2	p = .70
ATHLETE PREFERRED	12	3	-			
Athlete Percevied	13	2		.58	2	p = .80

This statistical finding illustrates quite conclusively that neither coaches nor their athletes expressed views consistent with the prescriptions of the Normative Model, and this evidence alone seriously questions both the validity of Chelladurai and Haggerty's Normative Model for Decision Styles in Coaching and the model's utility and applicability in Intercollegiate soccer.

The overall impressions therefore, from the Decision Styles Inventory descriptive data suggest that coaches prefer to use both autocratic or consultative decision styles much more than athletes, while neither group liked delegative styles at all. Coaches also chose the former two styles far more often than participative and (especially) delegative styles regardless of the situation described. Athletes also preferred coaches to utilize autocratic and consultative styles but, as a group (and in comparison to the coaches as a group), preferred the consultative style more than the autocratic style. Any assumption that athletes perceived or expected more autocratic decision-making from coaches, than coaches themselves actually reported, was not

supported. Nor was support given to the assumption that athletes would prefer more participation in decision-making situations. This confirms the hypothesis that these athletes generally prefer their coaches to make decisions on their behalf (Yukl, 1971; Mulder, 1978).

Finally, both the coach and athlete preferences for decision styles only supported 33% of Chelladurai and Haggerty's (1978) model prescriptions. Figure 3, illustrating the Normative Model of Decision-Making in Soccer Coaching, indicates that coaches perceived the CIAU soccer climate to be much more autocratic than the theoretical model suggests. Furthermore, Figure 4, illustrating player preferences for coaching decision styles, also suggests that soccer coaching at this level is both perceived and preferred to be primarily autocratic. The fact that the athlete descriptive data in particular is contrary to the theoretical model prescriptions introduces serious doubt in regard to the validity and hence the utility of the model in soccer coaching. Descriptive evidence alone would in fact, question the applicability of theoretical approaches such as this to the study of decision-making in any interactive team sport in the future.

THE LEADERSHIP SCALE FOR SPORT (LSS)

The coaching behavior categories described and defined by Chelladurai (1978) were operationalized using the LSS in its three forms. Preliminary statistical procedures using factor analysis did not produce evidence in support of the five factors, however too few cases for this particular statistical treatment may have contributed to these negative results. The responses for each of the three LSS forms in each of the five behavior categories are illustrated as overall means in Table 14.

In Table 14 it is apparent that athletes generally preferred and perceived less of each category of coaching behavior than coaches, except in democratic and autocratic behavior. Also, for all three response sets the total number of team means found significantly different from grand means were actually higher than the grand means, and the most differences appeared in the Social Support, Training behavior, Autocratic behavior and Rewarding behavior

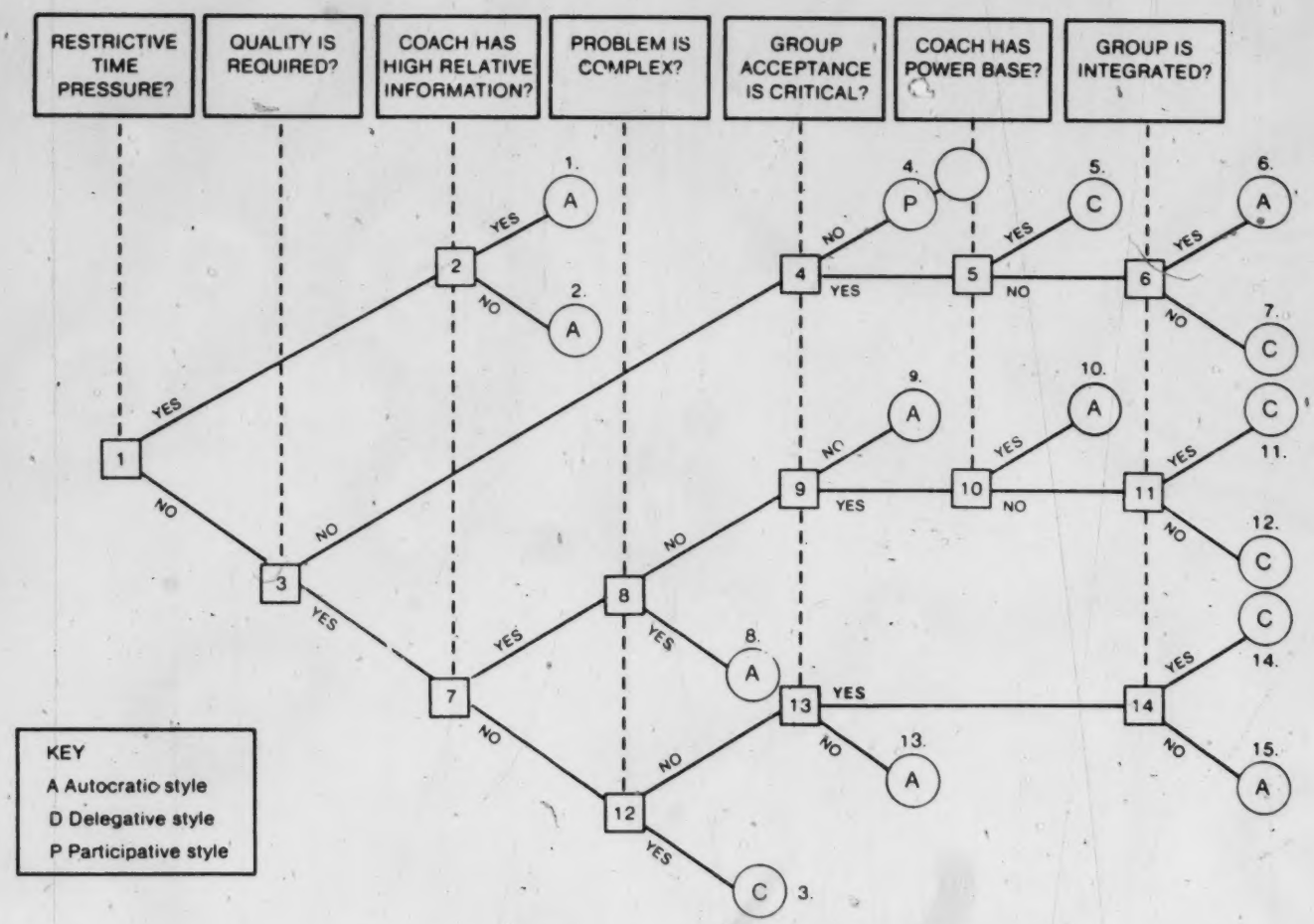

Figure 3. Normative Decision Styles in C.I.A.U. Soccer

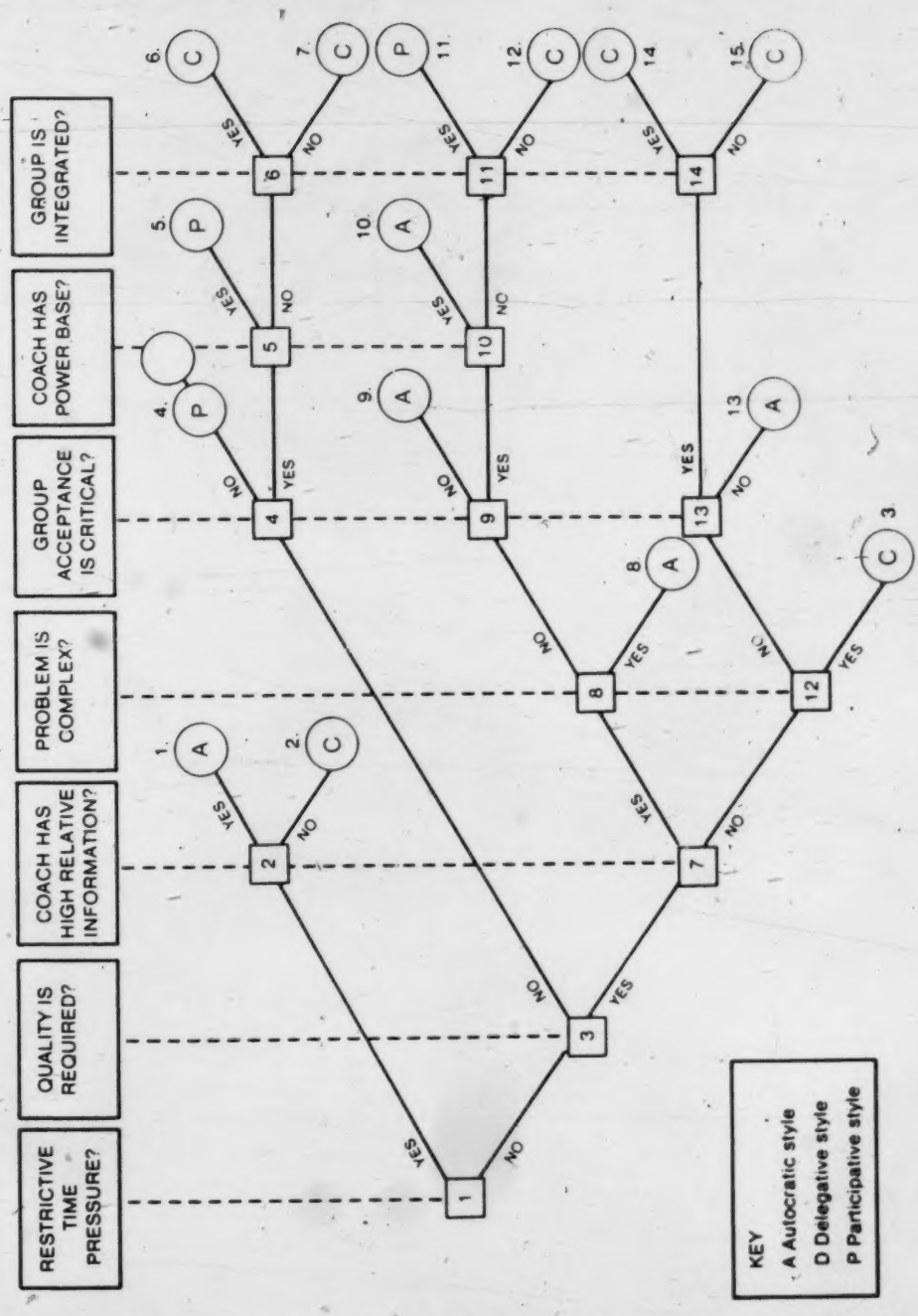

Figure 4. Player Preferences for Decision Styles in C.I.A.U. Soccer.

Table 14

Grand Means And Standard Deviations In The Leadership Scale For Sport (LSS)

Three LSS Response Sets	Five LSS Behavior Categories (SD)				
	Training and Instruction	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Coach Intended	4.16++	2.84+	2.74+	3.35+	4.43++
	(.53)7*	(.31)1*	(.48)4*	(.64)6*	(.39)8*
Athlete Preferred	4.11	3.14	2.32	3.21	4.05
	(.49)1*	(.56)2*	(.60)1*	(.56)5*	(.63)1*
Athlete Perceived	3.49	2.81	2.83	2.89	3.60
	(.61)4*	(.59)3*	(.60)5*	(.73)7*	(.73)1*

* Total means (by team) significantly different from Grand Mean

++ Significantly different from +

categories. As well as reporting more in nearly every category of coaching behavior, coaches also indicated that they would utilize Training behavior and Rewarding behavior significantly more than Democratic behavior, Autocratic behavior, and Social Support behavior. Coaches also indicated they would use Rewarding behavior and Training behavior 'often', Social Support and Democratic behavior 'occasionally' and Autocratic behavior 'seldom'.

While it is common for soccer coaches (and probably most other coaches) to exaggerate in their perceptions or opinions of their own behavior (e.g. Gordon, 1981), the reasons for this are unknown. Self-report behavior inventories often yield data that reveals lack of insight into one's own limitations but the tendency to "fake good" or enhance one's own behavior to suit experimenter expectations (however perceived) is also common (Anastasi, 1982). Whether the reasons stem from innaccurate perceptual errors or intentional distortion however, is not as important as realizing that coach self-reports of their own behavior simply cannot be trusted.

The surest way therefore, to determine incidences of coaching behavior must involve a combination of asking athletes, filming actual coaching activity and confirming these data with the coaches themselves.

Athletes also indicated that they would prefer coaches to display Training behavior and Rewarding behavior 'often', Democratic behavior and Social Support behavior 'occasionally', and Autocratic behavior 'seldom' - which is in line with the hypothesis from similar studies (e.g. Terry, 1984; Terry and Howe, 1984). With the exception of the Autocratic behavior category however, athletes in this study perceived less of each category than that preferred. The evidence therefore, partially supports the hypotheseis of Chelladurai (1978) in that Intercollegiate soccer players did prefer more Training behavior and Rewarding behavior than other categories of behavior but did not support Chelladurai's claim that these athletes would also prefer more Autocratic behavior. In general, the athletes perceived their coaches to use all five categories of behavior 'occasionally' as the summary of all three responses to the LSS illustrates in Table 15.

Table 15

Summary Of Responses To The Leadership Scale For Sport (LSS)

	Five LSS Behavior Categories (SD)				
Three LSS Response Sets	Training and Instruction	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Coach Intended	often	occas.	seldom	occas.	often
Athlete Preferred	often	occas.	seldom	occas.	often
Athlete Perceived	occas.	occas.	occas.	occas.	occas.

When individual team mean scores for coaching behavior were related to the mean scores of every other team, the majority of differences across all teams occurred in perceived behavior. As Table 16 illustrates only two very successful teams differed significantly from the lowest mean score in their preferences for Social Support behavior.

Table 16

Total Significant Mean Differences By Team For Athlete Preferred And Perceived Behavior By Won/Loss Grouping

Five Behavior Categories (Teams per group)	Preferred Behavior W/L % age group 1 (<30%) (3	2 (31-75%) 5	3 (80%+) 6)	Total	Perceived Behavior W/L % age group 1 (<30%) (3	2 (31-75%) 5	3 (80%+) 6)	Total
Training and Instruction					1	2	3	6
Democratic Behavior								
Autocratic Behavior						6	6	12
Social Support			2	2	2	7	13	22
Rewarding Behavior					2	2	2	6
				2				46
							Grand Total	48

With perceived behavior on the other hand, a total of forty-six significant differences across all teams were noted. Again, as illustrated in Table 16 most differences occurred in more successful teams and especially in athlete perceptions of Training behavior, Autocratic behavior, Social Support and Rewarding behavior. Athletes on more successful teams perceived significantly more coaching behavior in those four categories than athletes on poorer teams. It would appear therefore from Table 16 that athletes on the most successful teams both preferred and perceived significantly more Training behavior, Autocratic behavior, Social Support, and Rewarding behavior from coaches. This evidence suggests that performance success is related to all but one category of coaching behavior in the LSS (Democratic behavior) and is especially associated

with Social Support behavior which is the only behavior category non-contingent on performance.

From the coaching behavior evidence in this study the implications and recommendations for coaches would include the following: foster good interpersonal relationships with players on and off the soccer field (Social Support), use direct coaching styles (Autocratic behavior) in frequent and well organized instructional sessions (Training behavior) and provide plenty of positive feedback (Rewarding behavior). Supportive and encouraging coaching behavior, by informed competent and direct coaches seems to be a most effective 'formula' in CIAU level soccer.

The intercorrelations for Coach Intended, Athlete Preferred and Athlete Perceived behavior are illustrated in Table 17. These data suggest that in all three response sets Training behavior is significantly related to Social Support and Rewarding behavior; second, Democratic behavior is negatively related to Autocratic behavior; and third, Social Support behavior is positively related to Rewarding behavior. It is noticeable that Coach Intended Autocratic behavior is positively related to Training behavior, Social Support and Rewarding behavior while all six athlete correlations in these three relationships are negative. Evidently coaches do not consider Autocratic behavior necessarily independent from or harmful to other behaviors, nor particularly dysfunctional to their coaching. Athletes, on the other hand, do perceive Autocratic behavior as having negative effects on other coaching behaviors and the job of coaching. Their data suggest that Autocratic behavior is associated with less Social Support, Rewarding behavior and Training behavior. Finally, while both athlete response sets relate Democratic behavior positively to Social Support and Rewarding behavior, Coach Intended correlations in both these relationships are negative which indicates that coaches and athletes perceive the incidence of certain coaching behavior and its implications for the team very differently.

As an example of the above, athletes and coaches clearly see the use and effects of Democratic and Autocratic behavior differently which could be a serious perceptual problem.

Table 17

Intercorrelations Of Coach Intended, Athlete Preferred And Athlete Perceived Behavior (Total By Team)

Three Response Lists

Five Behavior Categories*	Coach Intended					Athlete Preferred					Athlete Perceived				
	T1	D	A	SS	R	T1	D	A	SS	R	T1	D	A	SS	R
Training and Instruction (T1)	1.00					1.00					1.00				
Democratic Behavior (D)	-.09	1.00				.10	1.00				.12	1.00			
Autocratic Behavior (A)	.22*	-.40*	1.00			-.13 (2)	-.23* (2)	1.00			-.12 (3)	-.40* (3)	1.00		
Social Support (SS)	.33*	-.04	.21*	1.00		.29* (1)	.38* (3)	-.09	1.00		.40* (3)	.46* (4)	-.30* (4)	1.00	
Rewarding Behavior (R)	.60*	-.07	.38*	.51*	1.00	.34* (2)	.24* (1)	-.06 (1)	.23*	1.00	.37* (2)	.38* (3)	-.41* (1)	.37* (2)	1.00

* $p < .01$

While athletes prefer Autocratic behavior least out of all the five behavioral categories (Table 14) and perceive its effects on other coaching behavior as both negative and harmful, the coaches appear to 'believe' in both its utility and positive function within their coaching role (Table 17). One possible explanation for this is also in itself a problem, and it concerns the inability of LSS items to refer specifically to precise situations or contexts in which behavior takes place. While further reference to this is made later, the challenge remains for coaches to use autocratic coaching behavior effectively as a positive behavioral tool which often plays a necessary part in enhancing overall performance.

From mean scores in Table 14, it could be expected that Athlete Preferred and Athlete Perceived social support scores would correlate negatively with Coach Intended Autocratic behavior as illustrated in Table 18. Also as expected, Coach Intended Democratic and Social Support behavior were positively related to Athlete Perceived Social Support scores, but one surprising relationship in Table 18 is the positive and significant relationship between Coach Intended Autocratic behavior and Athlete Perceived Training behavior. This positive relationship suggests that althletes do perceive coaching to involve Autocratic behavior and that Training behavior necessarily involves a lot of direct coaching methods. Perhaps therefore, athletes may not privately care much for direct coaching methods but, at the same time, realize that Autocratic behavior is inextricably part of soccer coaching at this level.

Table 19 illustrates that the more athletes prefer Training behavior, Democratic behavior, Social Support and Rewarding behavior, the more likely they are to report perceiving this type of behavior. Greater preferences for social support is significantly related to perceptions of Democratic behavior, however one noticeable non-significant relationship amongst correlations between athlete preferences and perceptions is for Autocratic behavior. Athletes therefore were not likely to prefer and perceive similar indices of Autocratic behavior and of the significant correlations on three teams one relationship was actually negative suggesting that athletes on this team perceived more Autocratic behavior than they would have liked. There were relatively few significant relationships using individual team data and most of

Table 18

Correlations Between Coach Intended Behavior And Athlete Preferred And Perceived Behavior

Coach Intended Behavior	Athlete Behavior: Preferred					Perceived				
	T1	D	A	SS	R	T1	D	A	SS	R
Training and Instruction (T1)	.03	-.03	.03	.00	.03	-.13	.04	.11	-.15	-.06
Democratic Behavior (D)	-.02	.10	-.09	.08	-.10	.07	.13	-.03	.21**	.08
Autocratic Behavior (A)	.08	.03	.05	-.25**	.10	.16*	-.05	.01	-.31**	-.03
Social Support (SS)	.10	.01	-.00	.25**	.08	.10	.03	.03	.24**	-.06
Rewarding Behavior (R)	-.04	-.11	.05	.01	.00	-.09	-.11	.10	-.14	-.13

* $p<.05$

** $p<.01$

Table 19

Correlations Between Athlete Preferred And Athlete Perceived Behavior (Total By Team)

Athlete Behavior Perceived	Athlete Behavior Preferred				
	T1	D	A	SS	R
Training and Instruction (T1)	.28** (4)	.04	.07 (1)	.12 (3)	.08 (1)
Democratic Behavior (D)	-.08 (2)	.31** (1)	.02	.20* (1)	.05 (1)
Autocratic Behavior (A)	.07 (3)	.03 (1)	.14 (3)	-.01 (3)	.03 (1)
Social Support (SS)	-.02	.02 (1)	.05	.47** (2)	.02 (1)
Rewarding Behavior (R)	-.01	.09 (1)	.10	.15 (1)	.27** (1)

* $p<.05$
** $p<.01$

these were with preferences for and perceptions of Training behavior, Autocratic behavior and Social Support. Preference for Social Support in particular, was positively related to athlete perceptions of each of the five behavior categories which is intriguing since Social Support involves coaching behavior that is ostensibly non-contingent upon performance.

Table 20 illustrates both significant values and total correlations for each behavior response set when related to the seven athlete satisfaction dimensions. The data in Table 20 suggest that the more coaches reported their use of Training behavior, Democratic, Autocratic and Social Support behavior, the more satisfied athletes were with their team's performance; second, the more coaches intended to use Social Support the more satisfied athletes were with their coach's expertise and social skills; and third, more Coach Intended Rewarding behavior was negatively related to athlete satisfaction in role clarity. In light of previous data and results from statistical analysis dealing with coaching effectiveness relationships, the single negative correlation is perhaps the only surprise in the Coach Intended data. However, lingering doubts remain concerning the reliability and credibility of using information on coach reports of their own intended behavior, especially when this is related to athlete satisfaction measures.

The data from correlating athlete scores on preferred behavior and satisfaction revealed only two significant relationships both in regard to Social Support behavior. They suggest that more preference for Social Support behavior from coaches is associated with greater levels of athlete satisfaction with personal performance and coach social skills. The few positive significant relationships between preferred behavior and satisfaction measures across all teams are meaningful if not statistically significant. However, the negative relationships with particularly Democratic and Rewarding behavior are puzzling. Explanations for this might include wide ranges of scores across all teams for preferred behavior or simply the questionable utility and reliability of this particular response using the LSS. Probably the most pertinent questions however are, how many levels of team success affected athlete preferences for coaching behavior?; and second, to what degree did athletes from winning and losing teams vary in their responses?

Table 20

Intercorrelations Between Coach Intended, Athlete Preferred And Perceived Behavior And Athlete Satisfaction Dimensions (Total By Team)

Three Leadership Scale for Sport Response Sets

Seven Athlete Satisfaction Dimension	Coach Intended T1	D	A	SS	R	Athlete Preferred T1	D	A	SS	R	Athlete Perceived T1	D	A	SS	R
Personal Performance	.02	-.02	-.02	.11	-.14	.12 (2)	.14	-.00	.16* (1)	.05 (1)	.19* (2)	.21** (2)	-.03 (2)	.14 (2)	.27** (2)
Team Performance	.44**	.33**	.23**	.34*	-.08	.14 (1)	-.01 (1)	.04	.06	.01	.29** (2)	.16* (2)	-.14 (2)	.10 (2)	.16* (2)
Coach Expertise	.03	-.13	-.09	.17*	-.11	.14 (1)	-.04 (1)	-.09	.14 (1)	.04 (1)	.54** (8)	.08 (1)	-.24**	.18*	.28** (2)
Social Skills	-.11	-.03	.00	.20*	-.03	.03	-.02	-.09 (3)	.23** (4)	-.04	.10 (1)	.32** (3)	-.44** (3)	.41** (3)	.28** (1)
Team Involvement	-.02	-.06	-.07	.07	-.09	.05	.01	-.12	.16 (2)	.01 (2)	.25**	.18*	-.10	.15 (2)	.22** (2)
Role Clarity	.05	-.06	.02	.07	.19*	.05 (1)	.02	-.10	.12	-.01	.37** (4)	.05	-.16* (1)	.13	.19* (1)
Role Acceptence	.01	-.07	-.00	.03	-.10	.01 (1)	.01	-.04	.15	.04	.22** (2)	.16*	-.03	18*	.18* (1)
Total by team						6	2	3	8	4	19	8	10	9	11
Grand Total by Team						23					57				

* $p < .05$

** $p < .01$

Certainly the most credible relationship in this particular analysis concerns what athletes perceived in coaching behavior and how satisfied they felt with aspects of their season, their coach and their personal role on the team. These data are indices of expressed cognitions and although the relationship between athlete perceptions and feelings may be biased through perceptual error, immature emotions or simple naive misunderstanding, they represent the feelings that best express what athletes saw or felt. As such they are the most meaningful data in Table 20 and without doubt the most obvious conclusion from these data is that perceived levels of Autocratic behavior impairs levels of athlete satisfaction and clearly affects *all* indices of coaching effectiveness in a negative way. This is most certainly the case in satisfaction with coaching expertise, social skills, and role clarity, but no other negative relationship or correlation was reported in this analysis.

Most of the significant correlations with satisfaction measures across all teams (total of nineteen) were with Training behavior and only the relationship with Social Skills was not statistically significant. Clearly Training behavior - the nuts and bolts of coaching e.g. physical, technical and tactical training, organizing and conducting practices - is very important in determining coaching effectiveness which substantiates the hypothesis that Training behavior is closely related to overall athlete satisfaction (Schreisheim, 1980). Similarly, a large number (eleven) of positive correlations were reported between all seven satisfaction measures and perceived Rewarding behavior. Perceptions of both Training behavior and Rewarding behavior therefore are closely associated with coaching effectiveness - and much more so than other categories of coach behavior. Perceived Democratic behavior was not significantly correlated to satisfaction with coach expertise and role clarity but was related to satisfaction with team performance, team involvement, role acceptance and especially personal performance and social skills. Significance was found in the relationship between perceived social support behavior and athlete satisfaction levels with coaching expertise, role acceptance and especially social skills but not for personal or team performance, team involvement or role clarity.

C. CONGRUENCY RELATIONSHIPS

As described earlier in Chapter 3 the computation and calculation of the following relationships was a complicated procedure. It was finally decided however, that the discrepancy scores between coach and athlete responses for both decision style choices and leadership behavior would be regarded as absolute scores and that signed differences would be ignored. Consequently, in the following tables that illustrate the relationship between congruence scores and satisfaction measures, *negative correlations indicate maximal satisfaction because discrepancy scores decrease*, and *positive correlations indicate decreases in satisfaction because congruence scores (discrepancy scores) increase*. Reference to least discrepancy scores and congruence scores is made using both terms interchangeably in the text.

DECISION STYLES AND COACHING EFFECTIVENESS

1. Coach Intended/Athlete Preferred Congruency

As shown in Table 21 only five of seven correlations between coach intended and athlete preferred congruency scores were statistically significant. The three negative correlations indicate that the closer the congruence (as the discrepancy decreased) between Coach Intended and Athlete Preferred decision styles the more satisfied athletes were with team performance (two teams) and role clarity (one team). As the congruence or discrepancy between coach and athlete decision style scores increased (positive correlation) athletes became less satisfied with personal performance and team involvement (one team each).

Subtracting Athlete Preferred from Coach Intended scores and relating them to satisfaction measures clearly did not produce the strong relationship that has been reported in business settings (e.g. Morse and Wagner, 1978). However, for two teams, satisfaction with team performance was significantly related to the decision style preferences of both coaches and athletes. Clearly the harmony between the two head coaches and their respective athletes over the decisions made in their season helped facilitate satisfactory team results in the opinions of athletes. The opposite was the case however, for athletes on one team where the discord

Table 21

Number Of Correlations Found Between Coaching Effectiveness Dimensions And Three Different Congruent Scores For Decision Styles

	CONGRUENT SET SCORES (PER TEAM)					
	'Coach Intended' and 'Athlete Preferred'		'Coach Intended' and 'Athlete Perceived'		'Athlete Preferred' and 'Athlete Perceived'	
Seven Coaching Effectiveness Measures	no. of significant correlations $p < .05$		no. of significant correlations $p < .05$		no. of significant correlations $p < .05$	
	+ ve	- ve	+ ve	- ve	+ve	- ve
Satisfaction with: (from 14 teams)						
1. Personal Performance	1		1			
2. Team Performance		2		2	1	
3. Coach Expertise			3			1
4. Coach Social Skills			5			4
5. Team Involvement	1		2			
5. Role Clarity		1	2			
7. Role Acceptance				1		
Total (possible)	5 (98)		16 (98)		6 (98)	
Grand Total (possible)	27 (294)					

between coach and athlete decision style preferences actually affected levels of athlete satisfaction with personal performance. Similarly, a discrepant relationship on one other team affected athlete satisfaction with team involvement.

Because participation is an important issue in this enquiry it is noticeable that in the satisfaction dimensions where athlete participation in decision-making could conceivably be

allowed (e.g. coach expertise, interpersonal skills, team involvement, role clarity and role acceptance), only one relationship with role clarity was reported. Similarity in preferences for decision styles between the coach and the athletes not only helped to clarify athlete roles, it also enhanced athlete satisfaction with their understanding of individual roles on the team.

From the few statistically significant findings in this relationship, the conclusions drawn lend some support to the notion that congruence in decision style preferences enhances athlete satisfaction, while discrepant scores adversely affect satisfaction. The results regarding satisfaction with individual and team results in particular, are especially important and significant for coaches who eternally search for means to optimize and enhance performance.

2. Coach Intended/Athlete Perceived Congruency

Subtracting Athlete Perceived from Coach Intended scores, and relating the results to satisfaction measures, revealed a total of sixteen significant correlations. This particular relationship is significant because discrepancy/congruence scores indicate how reliable coach reports of their own decision styles are in actuality. Clearly, from the results in Table 21 a high percentage of teams did not perceive the same decision styles that were reported by their coaches. The thirteen positive correlations indicate that not only were coach and athlete scores different, the degree of score discrepancy was actually related to reduced levels of satisfaction with personal performance (one team), coach expertise (three teams), coach social skills (five teams), team involvement (two teams), and role clarity (two teams). In three cases however, where athletes perceived the same decision-making styles that their coaches reported, athlete satisfaction with team performance (two teams) and role acceptance (one team) was enhanced.

Two main conclusions may be drawn from this evidence. First, decision-making styles are either perceived or understood differently by coaches and athletes (or coaches somehow inflate their decision-making behavior to the extent that leads their own athletes to dispute coach self reports); and second, athlete satisfaction can be enhanced as the discrepancy between coach reports and athlete perceptions of decision-making behavior decreases.

3. Athlete Preferred/Athlete Perceived Congruency

The third set of congruence scores, created by subtracting Athlete Perceived from Athlete Preferred scores, revealed a total of six significant correlations when related to satisfaction measures. The five negative correlations indicate that when athlete perceptions and preferences for decision-making styles were similar, their satisfaction with their coach's expertise (one team) and his social skills (four teams) increased significantly. On the other hand, as the discrepancy between these scores increased the opposite was true and satisfaction with team performance decreased. The incidence of satisfaction with coach social skills when related to congruence scores is worthy of remark since all the correlations across all teams in this category were negative. Although only four of these were statistically significant, it appears that athletes are happiest with their coach's interpersonal and social skills when they see what they want in terms of his decision-making styles.

Athletes 'seeing what they want' would seem to be the most potent relationship amongst the three congruency scores because however much athletes misinterpret or misunderstand coach decision styles, their preferences and perceptions for decision-making styles are likely to be more candid, sincere, and even more trustworthy than coach reports. Consequently, the significance of the above relationship (Athlete Preferred/Athlete Perceived) carries more weight than the other two congruency relationships.

In summary therefore, the results suggest that less discrepancy in all three decision style congruence scores is related to greater athlete satisfaction on different satisfaction measures, which verifies hypotheses expectations.

COACHING BEHAVIOR AND COACHING EFFECTIVENESS

MIDAS was also used to calculate team mean discrepancy scores in each of the five categories of behavior which were subsequently related to team mean scores for each of the seven dimensions of athlete satisfaction.

1. Coach Intended/Athlete Preferred Congruency

The results from overall scores in Table 22 illustrate that least discrepancy scores (congruence) between Coach Intended and Athlete Preferred Social Support behavior are significantly related to increases in athlete satisfaction with team performance, coach expertise, team involvement, role clarity and role acceptance. The same is true for Training behavior discrepancy scores when related to satisfaction with team performance. Table 22 also indicates that athlete satisfaction actually diminishes as the discrepancy between Coach Intended and Athlete Preferred Autocratic behavior increases.

The data demonstrate the telling effect of coach/athlete disputes over preferred coaching behavior. On the one hand, satisfaction with team performance is enhanced when coaches report using levels of Training behavior and Social Support behavior that athletes desire; while on the otherhand, team performance satisfaction suffers immensely when coaches report significantly more preference for Autocratic behavior than do their athletes (Table 14). Evidently, small discrepancies in Social Support behavior preferences (only) by coaches and athletes also enhances athlete satisfaction with other important aspects of coaching effectiveness. Similar results, although less significant, were also evident in other categories of coaching behavior.

Significant relationships, by team, for all categories of behavior and satisfaction dimensions totalled twenty-five - twelve negative correlations and thirteen positive, as illustrated in Table 23.

Attempts to generalize the impressions from these relationships would be unwise because each team's data would be best analysed and interpreted separately. As an example, it is noticeable that larger discrepancy scores in Democratic behavior significantly reduced satisfaction in personal performance (one team), coach expertise (two teams), team involvement (two teams) and role acceptance (one team). These results from athlete preferences for more and/or less Democratic behavior from coaches suggest that soccer players would be more satisfied with their coach if levels of participation and athlete input were

Table 22

Total Significant Relationships Between Coaching Effectiveness Dimensions And Congruence Scores - Coach/Athlete Preferred Behavior

Seven Effectiveness Dimensions	5 Behavior Categories				
Satisfaction With:	Training Behavior	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Personal Performance	-.08	-.02	.02	-.15	-.05
Team Performance	-.16*	-.07	.19*	-.18*	-.01
Coach Expertise	-.08	.13	.11	-.20*	-.09
Social Skills	.02	.03	.05	-.06	.01
Team Involvement	-.12	.09	.12	-.17*	-.09
Role Clarity	-.06	-.02	-.01	-.16*	.01
Role Acceptance	-.09	-.02	.02	-.16*	-.07

*p <.05

Table 23

By Teams - Relationships Between Coaching Effectiveness Dimensions And Congruence Scores - Coach/Athlete Preferred Behavior

Seven Effectiveness Dimensions	5 Behavior Categories				
Satisfaction With:	Training Behavior	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Personal Performance	2-	1	1		
Team Performance	1	1-		1	
Coach Expertise	1*	2*			
Social Skills		1-		1	1
Team Involvement	1-	2*		2	
Role Clarity			1-*	1-*	
Role Acceptance	1,1-	1*	1-,1		

p <.05
*p <.01

suitable to athletes. However, for some teams, this meant less democratic coaching behavior, while for other teams it meant more.

Since interpretations using the data from total scores and total correlations might lead to confusing conclusions, the best and most prudent summary involves a team by team interpretation. However, there does appear to be evidence to support and confirm the hypothesis that congruence scores between coach and athlete preferences for coaching behavior is related to significantly higher levels of athlete satisfaction and coaching effectiveness (Chelladurai, 1978).

2. Coach Intended/Athlete Perceived Congruency.

Table 24 indicates strong evidence to suggest that congruence between Coach Intended and Athlete Perceived coaching behavior is significantly related to coaching effectiveness.

Across all categories of behavior the correlations illustrate that when coaches report using the behavior that athletes perceive coaches using, athlete satisfaction is enhanced. Even in Autocratic behavior where the correlations are non-significant this appears to be the case. When correlations by team are totalled in Table 25 it is evident that low discrepancy scores in all behavior categories are significantly related to athlete satisfaction. Only ten of the fifty-four significant relationships suggest contrary evidence.

As a reliability check on coach reported behavior, this particular set of congruence scores provides three different conclusions. First, the LSS inventories are understood by both coaches and athletes who were able to report their preferences and perceptions for coaching behavior. The LSS inventory must therefore be regarded as more suitable for coaching behavior research than, for example, the Decision Styles Inventory. Also its utility and applicability should be strongly endorsed in spite of the non-contextual nature of the LSS items. Second, the evidence from these discrepancy scores confirms the hypothesis that coaching effectiveness is a function of the congruence between coaching behavior athletes perceive and the behavior coaches report using. And third, while athletes may be unsure and even innaccurate in reporting coaching decision-making styles, they apparently perceive and understand different coaching behaviors more clearly.

Table 24

Total Significant Relationships Between Coaching Effectiveness Dimensions And Congruence Scores - Coach/Athlete Perceived Behavior

Seven Effectiveness Dimensions	5 Behavior Categories				
Satisfaction With:	Training Behavior	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Personal Performance	-.10	-.11	-.00	-.05	-.27**
Team Performance	-.13	-.28**	.09	-.05	-.14
Coach Expertise	-.47**	-.22**	-.08	-.38**	-.36**
Social Skills	-.20*	-.05	-.09	-.28**	-.30**
Team Involvement	-.23**	-.12	-.14	-.26**	-.23**
Role Clarity	-.39**	-.19*	-.08	-.22**	-.21**
Role Acceptance	-.38**	-.14	-.12	-.18*	-.20*

*p <.05

**p <.01

3. Athlete Preferred/Athlete Perceived Congruence.

When Athlete Perceived behavior was subtracted from Athlete Preferred behavior, discrepancy scores were negatively related to all coaching effectiveness measures.

As illustrated in Table 26 scores on seven indices of coaching effectiveness were positively related to how closely athletes perceived themselves getting what what they wanted in terms of coaching behavior. This is particularly evident in the Training behavior discrepancy scores where congruence scores were significantly related to athlete satisfaction with team performance, coach expertise, social skills, role clarity and role acceptance. Low discrepancy scores in all five behavior categories were significantly related to athlete satisfaction with coach social skills and coaching expertise (Social Support behavior p=.05). The strongest

Table 25

By Teams - Significant Relationships Between Coaching Effectiveness Dimensions And Congruence Scores - Coach/Athlete Perceived Behavior

Seven Effectiveness Dimensions	5 Behavior Categories				
Satisfaction With:	Training Behavior	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Personal Performance	-2*	1*			-4*
Team Performance		-3*	-2*	-2	-1
Coach Expertise	-3	1*		-1	-3
Social Skills	-2	1*	-2*	-1	-2
Team Involvement	-1	-1	-2	-2	-2
Role Clarity	-3	1*			-2
Role Acceptance	-6	-1	1*	-1	

All negative $p < .05$

* one positive

relationships were found between satisfaction measures and the discrepancy scores for Training, Democratic, Autocratic and Rewarding behavior. It is worthy of note that none of the correlations for personal performance and team involvement with the five discrepancy scores were significant. Rather than depending on preferences for or perceptions of coaching behavior athletes perhaps believe that their satisfaction in both these dimensions is primarily a function of their own initiative.

In Table 27 only three of the thirty statistically significant correlations across all teams suggest that larger discrepancy scores reduce satisfaction levels in team involvement, personal and team performance (one team each). Low discrepancy scores, on the otherhand, in different behavior categories were commonly related to greater levels of athlete satisfaction on all aspects

Table 26

Total Significant Relationships Between Coaching Effectiveness Dimensions And Congruence Scores - Athlete Preferred/Perceived Behaviour

Seven Effectiveness Dimensions	5 Behavior Categories				
Satisfaction With:	Training Behavior	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Personal Performance	-.07	-.05	-.15	.03	-.15
Team Performance	-.24**	-.17*	-.14	-.05	-.14
Coach Expertise	-.47**	-.19*	-.23**	-.14	-.23**
Social Skills	-.21**	-.27**	-.32**	-.22**	-.22**
Team Involvement	-.14	-.07	-.08	-.07	-.03
Role Clarity	-.48**	-.12	-.20*	-.13	-.17*
Role Acceptance	-.24**	-.12	-.15	-.06	-.09

*p $<$.05

**p $<$.01

of coaching effectiveness. These results indicate the significant importance of low discrepancy scores on levels of athlete satisfaction. Athletes signified that when they perceive themselves being coached in the way they would like to be coached, they are significantly more impressed and satisfied with their coach's effectiveness. The implications for coaches who are not only interested in short term team results but also long term psychological benefits for players, are twofold. First, athlete opinions on various aspects of their sport involvement must be sought and continually used as a coach's reference to ensure that the demands athletes expect of their sport and of their coach are at least addressed if not fully met. And second, coaches who neglect to do this may (unwittingly or otherwise) alienate players and very likely affect the levels of athlete satisfaction required for sustaining motivation and facilitating and enhancing

Table 27

By Teams - Significant Relationships Between Coaching Effectiveness Dimensions And Congruence Scores - Athlete Preferred/Perceived Behavior

Seven Effectiveness Dimensions	5 Behavior Categories				
Satisfaction With:	Training Behavior	Democratic Behavior	Autocratic Behavior	Social Support	Rewarding Behavior
Personal Performance	-1	-1		-1	-1
Team Performance	-1	-2		-1	-1
Coach Expertise	-3		-2		-2
Social Skills	-1	-3		1	
Team Involvement	1	-1	-1		-1
Role Clarity	-2				-1
Role Acceptance	-1		1		

All $p < .05$

performance.

D. WON-LOSS/SUCCESS GROUP DATA

Significant relationships were found when the average won-loss data (59.9%) was correlated with coach and athlete overall means using the LSS. As Table 28 illustrates actual team success was significantly related to Training behavior and Social Support across all three response sets. With reference specifically to coach data it seems that successful coaching is also related to Rewarding behavior and Autocratic behavior which may have important implications for coach preparation courses.

Teams were subsequently grouped according to won-loss data and then related to athlete responses for coaching behavior and coaching effectiveness. Univariate one-way

Table 28

Significant Relationships Between Coach/Athlete Behavior (Means) And Average Won/Loss Percentage (59.9%)

Mean Scores (Total)

5 Behavior Categories	Coach Intended (18)	Athlete Preferred (157)	Athlete Perceived (161)
Training Instruction	.44**	.16*	-.23**
Democratic Behavior			
Autocratic Behavior	.17*		
Social Support	.45**	.19*	.16*
Rewarding Behavior	.34**		

* $P<.05$
** $P<.01$

ANOVA and pairwise contrasts revealed a number of statistically significant relationships as shown in Table 29. From this data athletes in the six highly successful teams (80+%) reported significantly more preference for Social Support from their coaches. They also perceived significantly more Training behavior from coaches, and reported significantly more satisfaction with their team's overall performance (understandably), and coaching expertise than the other two groups. Seven teams with an intermediate record (31-75%) perceived significantly more Social Support behavior from coaches than the other two groups, while five poor teams (less than 30%) perceived significantly more Autocratic behavior from coaches.

Table 29

Significant Differences In Won-Loss Groups
Between Coaching Behavior
And Coaching Effectiveness

Significant Relationships	Won-Loss Percentage Group		
	Group 1 0 - 30% (N=5)	Group 2 31 - 75% (N=7)	Group 3 80% + (N=6)
Behavior Preferred			
Social Support			••
Behavior Perceived			
Training behavior			••
Autocratic behavior	•		
Social Support		••	
Satisfaction			
Team Performance			••
Coach Expertise			••

• $p<.05$
•• $p<.01$

Chapter V

SUMMARY AND CONCLUSIONS

A. SUMMARY

In spite of a relatively disappointing response, the *sample* of eighteen coaches and one hundred and sixty-one athletes is regarded as an acceptable return rate (sixty per cent) in this type of study. Also, since the coaches were fairly well experienced and all the athletes were perceived as 'starters', the inferences drawn from their responses can be generalized with reasonable confidence to the total CIAU soccer coaching community.

The coaches were arguably under qualified in terms of CSA coaching certification for this level of soccer, which perhaps is not too surprising considering the prevailing attitudes of most Universities towards soccer programs and the current preference for part-time, off-campus soccer coaches. Primarily because of the cost benefit argument of the sport at Intercollegiate levels however, and as the growth and development of soccer at all other levels continues, it is expected that better qualified, full-time and on-campus coaches will become a priority for Athletic Departments in the future.

The *Personal Opinion Inventory (POI)* did not produce seven discrete factors or dimensions when the response data for the thirty-seven items was factor analysed. However, inter-item analysis failed to reveal rogue items that would have significantly affected measures of satisfaction on any of the seven dimensions. Successful teams reported significantly more satisfaction with personal and team actual performance, and athletes from successful teams were significantly more satisfied with their coach's ability to coach. However, since some of the least successful teams were also significantly more satisfied with personal and team performance than the most successful teams, and with coaching expertise, social skills and role clarity, there is definitely an indication that success alone does *not* automatically cause satisfaction. Therefore, while actual success and coaching expertise do appear related to satisfaction with personal and team performance, soccer players on the least successful teams

perceived coaching effectiveness *independently* from coaching success. When the satisfaction dimensions were intercorrelated it became evident that technically competent coaches who allowed athlete input to team affairs on and off the field, were more likely to enhance both performance and overall athlete satisfaction than were other coaches.

The *Decision Style Inventory (DSI)* produced evidence contrary to that predicted by the prescriptions in the Normative Model of Decision-Making in Coaching (Chelladurai, 1978). Delegative decision styles were not popular at all with either the coaches or athletes, and while athletes preferred more consultative and less autocratic styles than coaches, autocratic decision-making in soccer coaching was preferred and perceived much more than the prescriptions in the theoretical model would suggest. Since all four response sets (Coach Intended, Coach Normal, Athlete Preferred and Athlete Perceived) differed significantly from the Normative Model prescriptions for decision styles (only thirty-three per cent agreement), the theoretical model's applicability and future utility in studies of soccer coaching is seriously questioned.

The *Leadership Scale For Sport (LSS)* data indicated that coaches would use Training behavior and Rewarding behavior 'often', and significantly more than Democratic behavior ('occasionally'), Social Support behavior ('occasionally'), and especially Autocratic behavior ('seldom'). This finding confirmed study hypotheses, as athletes also preferred their coaches to display Training and Rewarding behavior 'often', Democratic and Social Support behavior 'occasionally', and Autocratic behavior 'seldom'. Athletes however, perceived less of each category of coaching behavior than coaches, except for Autocratic behavior. Players on the most successful teams both preferred and perceived significantly more Training behavior, Autocratic behavior, Social Support and Rewarding behavior from coaches, than did athletes on less successful teams. Similarly, actual performance success was related to all but one category of coaching behavior (Democratic behavior) and especially to Social Support behavior. The evidence suggests that coaches who are perceived to be both technically competent and direct but also supportive and friendly and give positive feedback, are most likely to be both effective

and successful in CIAU level soccer.

When the three response sets were intercorrelated a positive relationship was found between Training behavior and both Social Support and Rewarding behavior. Perceived technical expertise therefore, was strongly associated with support and encouragement (Social Support) and positive feedback (Rewarding behavior). While coaches perceived the use of Autocratic behavior as having a positive effect on Training behavior, athletes clearly felt that autocratic coaching methods were related to significantly less Social Support, Rewarding behavior and Training behavior. Although athletes perceived significantly more levels of autocratic coaching than they preferred, their perceptions of Autocratic behavior related positively to Training behavior. So while athletes may not prefer autocratic coaching behavior they apparently understand that it plays an important part in the job of coaching. This finding seems to suggest that, at least as they are defined by Chelladurai (1978), direct coaching methods (Autocratic behavior) may not be clearly distinguishable from Training and Instruction behavior and are perhaps not perceived separately at all by athletes.

When the behavior response sets were correlated with coaching effectiveness measures, satisfaction with team performance was significantly related to coach reports of Training behavior, Democratic behavior, Autocratic behavior and Social Support. Athlete perceptions of Training behavior, Rewarding behavior and to a lesser extent Democratic behavior and Social Support, were closely related to all indices of coaching effectiveness.

In conclusion, the behavioral data analyses suggest that soccer coaches who typically provide ample technical and tactical information (Training behavior) together with a liberal amount of positive feedback (Rewarding behavior) are especially likely to be regarded as effective by their athletes.

Decision style and coaching behavior *congruence scores* were calculated using the procedure outlined by Yukl (1971) and adopted by Chelladurai (1978). Evidence was found to support the assumptions in the Multi-Dimensional and Discrepancy Models that discrepancy scores between both coach and athlete decision styles and coaching behavior are curvilinearly

related to both performance and satisfaction (perceptions of coaching effectiveness). In otherwords, least discrepancy in coach/athlete dyad scores enhances athlete perceptions of coaching effectiveness.

In regard to *decision styles*, there was not a strong relationship between congruence scores and coaching effectiveness measures. However, satisfaction with team performance was related to both coach and athlete decision style preferences and perceptions. When athletes 'see what they want' in terms of decision styles, satisfaction with coaching expertise and social skills is enhanced, and high discrepancy scores in all three congruency relationships are related to reduced levels of satisfaction in both performance aspects and interpersonal relationships with the coach. Although there was evidence that decision styles may have been perceived or understood differently by coaches and athletes, it could be concluded from resonse patterns in the data analysis that coaching effectiveness may be enhanced as the discrepancy between coach and athlete preferences for and perceptions of decision styles decreases.

While a team by team analysis would best illustrate the congruency relationships between preferences for and perceptions of *coaching behavior*, there is general support for the above conclusions on decision style discrepancy scores. That is, patterns of congruence scores in coach and athlete preferences for and perceptions of coaching behavior are also significantly related to perceptions of coaching effectiveness. Athletes apparently understood the five behavior dimensions in the Leadership Scale for Sport (LSS) better than the fifteen cases described in the Decision Styles Inventory (DSI) although the LSS items are non-situation specific. The use of the LSS in further study is therefore strongly recommended. Measures of athlete satisfaction were closely related to athlete preferences for and perceptions of all five dimensions of coaching behavior and in particular with Training behavior. Satisfaction with team performance however, appeared to be negatively affected when coaches reported significantly more preference for Autocratic behavior than athletes.

In general, the evidence from the coaching behavior congruency relationships with coaching effectiveness measures suggests that athletes clearly prefer and respond to particular

coaching methods. In order of preference Training behavior, Rewarding behavior, Social Support and Democratic behavior are particularly popular with athletes. Autocratic behavior however, as it was described to athletes in this study, was the least liked category of behavior although athletes did relate this type of behavior positively to Training behavior.

The overall relationship between average *won-loss data* and both coaching behavior and coaching effectiveness measures revealed that actual success was associated with Training behavior, Social Support, Autocratic behavior and Rewarding behavior. Players on the most successful teams also preferred significantly more Social Support behavior and perceived significantly more Training behavior than did players on less successful teams. Successful teams were also significantly more satisfied with their team's performance and with their coach's technical expertise than were less successful teams. On the other hand players on the poorest teams perceived significantly more Autocratic behavior than players on more successful teams. *Actual success*, therefore, was related to technically competent coaches who exhibited direct coaching methods in a positive, supporting and friendly manner.

In concluding this section the following hypotheses were confirmed by the results:

1-1. Coaching effectiveness (athlete satisfaction) measured by the Personal Opinion Inventory (POI), is a function of the congruence between Coach Intended and Athlete Preferred behavior.

1-2. Coaching effectiveness is also a function of the congruence between the Coach's Perceived decision-making styles and Athlete Preferences for decision styles.

1-3. Athlete satisfaction with both individual and team performance is a function of the congruence between Coach Intended and Athlete Preferred behavior.

1-4. Higher levels of actual performance success perceived by athletes is related to athlete satisfaction with coaching expertise.

2. Training and instruction behavior of coaches is related to overall athlete satisfaction and especially satisfaction with role clarity and personal performance (Schreisheim, 1980).

3. Greater role clarity is related to athlete satisfaction with personal performance and general team involvement (Ivancevich et al, 1972).

4. Athletes prefer coaches who display Training behavior and Rewarding behavior 'often', Democratic behavior and Social Support behavior 'occasionally', and Autocratic behavior 'seldom' (Terry, 1984; Terry and Howe, 1984).

6. All seven dimensions of athlete satisfaction intercorrelate (Whittall and Orlick, 1978).

7. Satisfaction with personal and team performance is highly related to objective measures (won-loss data) of actual performance (Chelladurai, 1984).

8. Perception of athlete involvement ('inclusion') contributes significantly to evaluations of overall coaching effectiveness and is itself an important satisfaction dimension (Carron and Bennett, 1977).

9. Greater satisfaction in decision-making is related to greater levels of athlete satisfaction (Locke and Schweiger, 1979).

10. Intercollegiate soccer players generally prefer their coaches to make decisions on behalf of their team. (Yukl, 1971; Mulder, in Brandstatter et al, 1978).

11. Athlete satisfaction is related mostly to congruence in athlete preference/perceptions of Training behavior and Rewarding behavior (Chelladurai, 1984).

12. The social character of Intercollegiate soccer players, revealed in athlete preferences for both coaching behavior and coaching decisions, compels coaches to be predominantly firm, direct, and autocratic (based on Maccoby, 1976, 1981).

The following hypotheses were not supported:

1-5 Intercollegiate soccer players prefer more Training behavior, Autocratic behavior, and Rewarding behavior than other categories of coaching behavior (Chelladurai, 1978). Only partial support was found for this hypothesis because athletes did not like Autocratic behavior at all. However, they definitely preferred Training behavior and Rewarding behavior most of all and associated Autocratic behavior positively to Training behavior.

5. Athletes on winning and losing teams (i.e. teams with the highest and lowest won-loss percentage records) report the highest and lowest levels of overall satisfaction respectively (Lawler and Porter, 1967). This hypothesis was not supported. Some athletes on losing teams actually reported significantly *higher* levels of satisfaction than athletes on more successful teams.

B. CONCLUSIONS

SAMPLE

1. CIAU soccer coaches have considerable coaching experience but have not attained advanced levels of coaching certification. This may appear inconsistent with the improvements in standards of play and the growth and popularity of the game in all universities across Canada that calls for the best qualified, full-time, on-campus, male and/or female coaches available.

COACHING EFFECTIVENESS MEASURES

1. In spite of item-analysis data, the factor analysis results would suggest that the Personal Opinion Inventory (POI) is not yet sufficiently reliable for use in future studies on satisfaction in sport.

2. While satisfaction with personal and team performance is probably a function of actual team success, some other facets of satisfaction are not directly related to success.

3. Actual success does not influence reports of athlete satisfaction with coaching expertise and athlete role factors (role clarity, role acceptance, and team involvement).

4. While effective coaching probably includes elements of success, there is evidence to suggest that successful coaches are not necessarily regarded effective by athletes.

5. Although coaching expertise is significantly related to success, athletes can identify other coaching abilities and qualities and regardless of actual performance and success.

DECISION-MAKING STYLES

1. The utility of the Normative Model for Decision-making in Coaching (Chelladurai and Haggerty, 1978) is limited. Only 33% agreement was found with the model's theoretical prescriptions.

2. The use of delegative decision-making styles in soccer coaching is not recommended. Neither coaches not their athletes indicated any substantial preferences for this style.

3. Coaches should consult with their athletes more often on the decisions that need to be made. Consultation, that still requires the coach to make the ultimate decision, was preferred significantly more by athletes than was autocratic decision-making by the coach.

4. In general, CIAU soccer players expected their coaches to be responsible for decision-making.

COACHING BEHAVIOR

1. Both coaches and athletes preferred the use of Training behavior and Rewarding behavior 'often', Democratic behavior and Social Support 'occasionally'. and Autocratic behavior 'seldom'.

2. Coaches preferred using significantly more Training behavior and Rewarding behavior than other coaching behavior.

3. All categories of coaching behavior (except Democratic behavior) were related to coaching success. This was especially true for Social Support. The most successful coaches exhibited Training behavior, Social Support, Autocratic behavior and Rewarding behavior.

4. Training behavior was significantly related to Social Support and Rewarding behavior in both the athlete and coach data.

5. Coaches and athletes perceive the utility of Autocratic behavior, as described in the LSS, differently. While coaches associated the use of direct coaching (as indicated by Autocratic behavior) with Training behavior, athletes felt that Autocratic behavior had negative effects on Social Support, Rewarding behavior and Training behavior. Athletes also reported that Autocratic coaching methods had similar negative effects on most measures of coaching

effectiveness.

6. In spite of the above (5), athletes feel that autocratic or direct coaching methods are integral components of coaching behavior and, in particular, Training behavior.

7. Athlete satisfaction with performance factors is significantly related to coach reports of Training behavior, Social Support, Autocratic behavior and Democratic behavior. Similarly, the more coaches report using Social Support the more satisfied athletes are with the coach's expertise and social skills.

8. Athlete preferences for Social Support is significantly related to athlete satisfaction with personal performance and coach social skills.

9. Finally, coaches who exhibit Training behavior, Democratic behavior, Social Support and especially Rewarding behavior - but not Autocratic behavior - are regarded as effective by their athletes.

CONGRUENCY SCORES

1. Consistent with Chelladurai's (1978) assumptions and calculations of congruency data, the evidence from coach/athlete dyad scores for ***both*** decision-making styles and coaching behavior suggests that there is a significant curvilinear relationship between least discrepancy scores and higher ratings of athlete perceptions of coaching effectiveness.

2. Also, in support of the above (1), incongruency or increased discrepancy scores are negatively related to athlete measures of satisfaction.

3. Congruency between coaches and athletes in preferences for and perceptions of Training behavior was significantly related to ratings of coaching effectiveness.

4. Dislike of ***Autocratic behavior*** by athletes on one hand, and athlete preference for ***autocratic decision-making*** on the other hand, is probably due to the non-contextual nature of the forty LSS items as opposed to the fifteen situation specific DSI cases.

5. In both decision styles and coaching behavior the dyad discrepancy between what athletes 'see' (perceive) and what they 'want' (prefer) is the most potent of the three congruence set scores primarily because of the dubious validity and unreliability of coach and

athlete self-report data.

WON-LOSS DATA

1. Actual success is related to technical competence (Training behavior), direct coaching (Autocratic behavior), supportive and friendly interpersonal relationships (Social Support) and positive feedback (Rewarding behavior).

2. Players from successful teams *prefer* more Social Support and *perceive* more Training behavior from their coaches than do less successful players.

3. Successful players are also significantly more satisfied with team performance and coaching expertise.

4. Players from less successful teams in this study perceived significantly more Autocratic behavior from their coaches than did successful players.

C. IMPLICATIONS

From the present study it is evident that as well as conceptual linkages between coaching behavior, decision styles and coaching effectiveness, there are also empirical data to support this relationship. In otherwords, it is safe to argue that coaching behavior *and* decision styles *do* impact upon both the performance and satisfaction of athletes, and to such an extent that it can no longer be overlooked by coach education programs which may appear at times to be primarily concerned with technical competency. Similarly, it is also safe to argue that the most effective coaching behavior and decision styles for CIAU competitive soccer are far more autocratic and authoritarian than was perhaps previously thought.

The above indicates that successful coaches can no longer assume that because of their success they are also perceived effective by athletes. By allowing athletes input to team affairs and by agreeing upon individual roles clearly through discussion with athletes, competent coaches can, in fact, enhance performances to the satisfaction of athletes, regardless of results. Perhaps therefore Athletic Directors should not give as much weight to won-loss records in the appointments of Intercollegiate coaches as general managers in professional sports appear to

do.

Coaches should definitely avoid delegating responsibilities for decision-making to players since players are suspicious of, and dislike, delegative decision-making. On the other hand, consultation with players on the decisions that need to be made, would be preferred by players who much prefer being 'consulted' to being 'told'. In general therefore, CIAU coaches should willingly accept the responsibility of making final decisions because players not only prefer this, they expect it of coaches at this level of competition.

Whereas the humanistically ideal coach would be theoretically opposed to the notion of autocratic coaching means, the information obtained in this study from decision style data reveal that both athletes and coaches prefer and expect authoritarian behavior. However, even if this evidence does suggest that competitive soccer:

> ...is a poor training ground for citizens in a democracy (Smith, 1985)

explicit guidelines for coaching certification programs must never lose sight of the fact that the role of the coach at any competitive level is that of a facilitator - not a dictator. Consequently, while coaches may make decisions for athletes e.g. setting individual and/or group goals, the short and long term effectiveness of their autocratic methods depends directly upon *how* the decisions are implemented. It is imperative therefore, that autocratic coaches are *concomitantly* supportive, encouraging, friendly and positive (e.g. Latham and Saari, 1979).

Intercollegiate soccer athletes probably expected and/or preferred coaches to make decisions for them because group goals and their attainment are spelled out clearly and are important. Also, both coaches and athletes readily acknowledge and seem comfortable with the fact that coaches are socialized into authoritative positions and consequently are expected to exhibit authoritative behavior. Certainly, those coaches who do not 'take charge' or who appear 'laissez-faire' will neither be successful nor effective and even risk being disliked by athletes. As the XB manager-types described by Argyris (1971), soccer coaches would seem to be compelled

to use behavior that is consistent with the coaching role which, in turn, pre-determines their behavior. On the other hand, there is also the expectation of athletes in this study that coaches should be supportive and friendly regardless of performance (Social Support) and provide positive feedback (Rewarding behavior) especially when teaching the fundamental techniques (Training behavior). This evidence, together with obvious athlete dislike for general or non-specific Autocratic behavior, suggests that soccer coaches should adopt a "benevolent-autocrat" role which allows for firm and direct coaching methods but within an atmosphere that does not alienate anyone.

While the social structure or social character (Maccoby, 1981) of the athletic sub-culture of soccer may call for a "benevolent-autocrat" coach, the implications for coaches in other athletic sub-cultures e.g. recreational, elite amateur or professional levels of involvement might be quite different. The moderating factors of, for example, task interdependence (e.g. Carron, 1980) would almost certainly oblige coaches in different sports to evaluate their role and the role expected of them by athletes. For example, while the implications for soccer coaches in this study could justifiably apply to coaches from other interactive dependent sports (e.g. basketball, hockey), they would be entirely inappropriate for coaches of either reactive/proactive dependent sports (e.g. reactive - football pass receiver, baseball catcher; proactive - football quarterback, baseball pitcher) or coactive dependent sports (e.g. rowing, tug-o'-war) or independent sports (e.g. bowling, individual track and field events). Similarly the implications and inferences from this study on sport leadership, decision-making in coaching and coaching effectiveness would be inappropriate or only tangibly linked at best with analyses of executive effectiveness in business and industry.

Two categories of behavior however, that have been consistently referred to in leadership studies are *initiating structure* and *consideration* which are analogous with Chelladurai's (1978) Training behavior and Social Support respectively. Because both these categories of behavior are prominent in this study, the demands on and characteristics of coaching leadership may not be too dissimilar from the general leadership characteristics that

transcend different situations and vocations. Rewarding behavior however, that was significantly related to Training behavior in this study, may be an especially important third category of behavior for coaches who, through autocratic means, are constantly demanding improvements in both mental and physical efforts under publicly competitive situations that are often highly stressful. Positive feedback therefore, would appear to be crucially important behavior for coaches while perhaps not so critical for leaders in business settings.

Finally, because athletes may often misunderstand or misread situations in which decisions are made and misinterpret certain coaching behaviors, coaches should periodically check both their verbal and non-verbal communication *as well as* behavior with athletes. Clear, consistent and comprehensible coach behavior in this study was a necessary first step towards least discrepancy in coach/athlete preferences for both decision styles and coaching behavior; and congruency between coaches and athletes for coaching behavior and decision style preferences was positively related to athlete perceptions of coaching effectiveness.

D. RECOMMENDATIONS

By way of introducing this section it is apparent that the availability of a perfect theory or methodology or even research design may never materialize for future study of the relationship between preferences for and perceptions of coaching behavior decision styles and measures of coaching effectiveness. Furthermore, while the approach and assumptions adopted in the present study represent a significant improvement on previous investigations, the difficulties associated with attempting to measure cognitive activity precisely (e.g. athlete perceptions, opinions, thoughts, preferences etc.) will undoubtedly linger as further research continues. In spite of the problems that lie ahead however, some recommendations are described in the following and listed in briefer form later. These should be fully considered prior to replicative study in this area.

The Decision-Making Model and more especially the Multidimensional Model have merit in studies such as this and are therefore recommended for further use in future research.

However, both models suffer from major flaws in both their operation and assumptions that severely inhibit the utility of the theoretical concepts they represent. For example, there is a need for a more valid and reliable Decision Style Inventory (DSI) which must satisfy appropriate scientific testing procedures prior to sport specific pilot tests which, in turn, must precede final administration. The scope and content, therefore, of the problem cases must be more precise and at the same time inclusive. Similarly, the scope of decision styles should be extended to include consultation with assistant coaches, with one athlete and/or with one or more athletes. The Leadership Scale for Sport (LSS) on the other hand, which has been validated and tested for reliability, has items that do not tap specific coach behavior because the context or situation in which behavior is supposedly perceived is not described. This severely limits the applicability of the LSS in sport specific studies. Furthermore, if attempts are made to ascertain prescribed behavior, a contextualized and sport specific LSS inventory should really be pre-fixed by "the coach should....".

If athlete satisfaction is to represent measures of coaching effectiveness, an acceptable Satisfaction Inventory must be developed. The construction of this inventory must also take into account the performance of a coach over time. For example, team performance and actual success could be related to the team's potential or ranking at the beginning of a season, so that all facets of satisfaction could be measured against prior athlete expectations. Additional facets of satisfaction e.g. recruiting practises and appointment and utilization of assistants, could also have potential value for tapping athlete measures of coaching effectiveness and should therefore be included in item analyses when constructing an inventory

Some problems might arise if future investigations are content to use the current assumptions concerning the nature of discrepancy in coach/athlete dyad relationships. An in-depth examination of discrepancy assumptions is therefore recommended prior to further study, and for at least two reasons. First, while this study adopted Chelladurai's (1978) assumptions of a curvilinear relationship for discrepancy scores, problems could arise when determining causes of dissatisfaction. For example, in a curvilinear relationship team members

may be dissatisfied when the coach's actual behavior is either higher *or* lower than that perceived and/or preferred by athletes. Second, while Yukl's (1971) Discrepancy Model accounts for both linear and curvilinear relationships between subordinate satisfaction with the leader, subordinate (athlete) perceptions of 'importance' might still distort discrepancy measures. As Yukl explains:

> In a discrepancy model, satisfaction is a function of the difference between a person's preferences and his actual experience. The less the discrepancy between preferences and experience, the greater the satisfaction. This hypothesis has received some support but the evidence is by no means conclusive. In some versions of the discrepancy model there is a second hypothesis which states that the amount of dissatisfaction with a given discrepancy also depends upon the importance of the needs affecting the preference level. If importance varies from person to person, the discrepancy scores cannot be compared unless first adjusted for importance. Whether such a correction is necessary, and if so, how it should be made, appears to be a matter of growing controversy. (Yukl, 1971,419)

In light of the above, and especially for decision-making, the current assumptions on discrepancy relationships, whether linear or curvilinear, will have to address the saliency and importance of decision issues to both coaches and athletes. Discrepant scores on non-salient or unimportant matters might otherwise assume greater significance than is warranted, and could distort general findings. The 'importance' variable identified as an intervening problem on the perceptions of athletes and coaches leads to another set of recommendations which arises from the limitations inherent in self-report studies.

Self-report studies of perceptual measures are used extensively in leadership research and elsewhere and have at least one significant inherent weakness as described by Stinson.

> It is feasible that perceptual measures are actually measuring leader behavior in critical incidents. Such measures are based on recall, and recall is influenced by recency and affective content. The follower may therefore be describing how the leader behaved in a situation (or situations) which was affectively significant to the follower. If so, perceptual measures provide little information regarding how frequently the leader actually engages in specific behavior. (Stinson, in Hunt and Larson, 1977, 114)

In addition many behaviors or qualities attributed to leaders may be evidence for 'wish fulfillment' on the part of subordinates. For example, involvement or participation by subordinates in decision-making may actually be dreamed up by athletes who like to think they are more involved than they actually are. This situation therefore concerns the problem of subordinates (athletes) really attributing positive leadership styles and behaviors that are neither present nor perceived. It is also known however, that athletes can attribute *fewer* positive traits to their coaches than coaches attribute to themselves. Percival (1971) found that coach ratings of themselves on technique and methods, knowledge, mechanics and especially personality measures were far more favorable than the ratings their own athletes provided. Cratty (1981) has suggested however that perhaps lower athlete ratings of coaching behavior (as evidenced in this study) could be due to levels of frustration rather than perceptual inaccuracies.

> The frustrations of competition are often not absorbed by the exercise inherent in the sport itself. Thus, the coach may be an unwilling, and unknowing, scapegoat for feelings of inadequacy and frustration the athlete himself may harbor. (Cratty, 1981, 277)

Similarly, evidence from other sport studies suggests that athlete evaluations and perceptions of coaches are seriously affected by whether or not the athletes themselves are 'problems' or deviants (Nelson et al, 1983) and whether or not athletes perceive cohesiveness on the team (Carron and Chelladurai, 1981). Self-report studies therefore, suffer from all of the above problems concerning athlete perceptions of coach behavior and, together with the unreliable and self-flattering data coaches themselves contribute, compel researchers to consider other or at least additional means of gathering data. The recommendation therefore, is for a more multi-disciplinary approach to data collection in this area, to augment self-report measures.

A multi-disciplinary or multi-instrument approach to sport leadership, which should of course examine the similarities and dissimilarities between different sports, different

competitive levels, age levels and gender differences, will be better able to tap the significance of both micro and macro variables that influence the behavior of both coaches and athletes. The short-range micro approaches to the study of sport leadership, characterized by theory or model testing self-report inventories and sophisticated statistical techniques, ignore the large and therefore complex social structure in which sport teams operate. Consequently their findings are often interpreted completely out of context. Also, the reality of the situation in which any behavior is exhibited is often lost or distorted because of the reliance on introspective speculation and subsequently these reductionist techniques or micro approaches will have limited utility in attempts to generate any general theory of sport leadership. While Chelladurai's (1978) Multidimensional Model of Sport Leadership provides a significantly improved framework for leadership study in athletic situations, it still relies on what leaders or subordinates (coaches and athletes) 'say' they do, 'could' do or 'should' do. The first recommendation therefore, is to complement self-report measures with observational study of leaders in action.

While observational systems like the Coaching Behavior Observational System (CBOS) (Smith, 1978) and the Coach Behavior Assessment System (CBAS) (Smith, Smoll and Hunt, 1976) are suitable for studying coach behavior at practise and in competition respectively, they essentially record only verbal and non-verbal communication. In otherwords, even with audio-visual video equipment at hand, neither CBOS nor CBAS can inform the researcher either how coach behavior is perceived or understood by athletes. The coach-athlete interview would therefore seem to be a second necessary and worthwhile research tool to use, to validate coach behavior and to confirm what is going on. Finally, one further data gathering technique is the ethnographic approach which combines the best features of longitudinal study, that allows for a deeper understanding of the sport team as a sub-culture within a larger system, and observation, either as a participant or as an objective bystander.

"Ethnography" is a term that belongs to anthropology and it provides the basic descriptive data on which cultural anthropology is founded. As the father of ethnography,

Harry Wolcott describes:

> Ethnography is literally an anthropologists picture of the way of life of some interacting human group. (Wolcott, 1975, 12)

The procedure involves lengthy periods of observation and documentation of leadership patterns, power hierarchies, chains of communication and the atmosphere or climate in which all behavior takes place. The techniques that are used generate far superior and deeper understandings of what goes on in groups without reducing data to objective measures that are often too complicated or too obscure to interpret. No single technique of gathering data and no combination of techniques automatically produce an ethnography i.e. there is no 'magic' formula. Effective fieldwork however, really depends on 'triangulation', or the multi-instrument approach, where participant observation (often regarded as the essence in ethnographical research methodology), interviewing, and use of written sources and analysis or collection of non-written records, are the typical techniques used.

Wolcott has strongly defended this subjective descriptive research tool against claims for more objective and sophisticated research methodology in the following. His response to the criticism that ethnographers could not possibly observe everything or document all behavior accurately, was:

> ...we do not have to know everything, before we can understand anything. (Wolcott, 1980)

Ethnography techniques, which can complement self-report measures, may significantly improve the research approaches to the study of sport leadership. Only when these various techniques, e.g. interviews, audio/visual taping, observational systems, are operationalized in combination and in longitudinal studies, can researchers reasonably claim to be tapping all the

micro and macro variables impacting on the sport leader; and only then will the possibility of a general theory of sport leadership become a reality.

The final recommendation for further study concerns some evidence on locus of control effects on decision-making which strongly suggests that this particular personality measure might affect the decision styles of coaches. Briefly, Rotter's (1966) conception of locus of control is that individuals can perceive their life's chances and fate to be out of their control, or caused by their own living environment; or, they can perceive that their life's chances are controlled by themselves and by their personal efforts and abilities, decision-making etc. In the former case, individuals are described as 'externals' since their fate is regarded as out of their control. In the latter case, individuals are described as 'internals' since they believe their fate is controlled by their own efforts and initiatives. In a study by Elkins and Cochran (1978) it was found that 'internals' relied more on personal persuasive power in gaining control in decision-making situations while 'externals' tended to use more coercive power to achieve the same effect. The researchers also reported that 'externals' were characterized as being psychologically powerless in decision-making situations and having little expectancy of influencing others. Wheeler and Davis (1979) also found that 'internals' experienced greater difficulty in arriving at a definite decision to 'accept' or 'reject' when that decision resulted in serious consequences for others. Evidence such as this suggests that an investigation of the relationship between locus of control and decision-making in coaching at all levels of competition, especially when decision style preferences are related to coaching effectiveness, would be warranted.

In summary, although the approach in the current study has been seen to be a methodological advance beyond previous studies of sport leadership, some important additions could be made to significantly enhance future research in this area. These additions, in the form of recommendations are briefly listed in the following:

1. The future utility of both the Decision-Making Model (Chelladurai and Haggerty, 1978) and the Multidimensional Model of Leadership in Sport (Chelladurai, 1978) depends

upon establishing valid and reliable operational measures (DSI and LSS) that must also be adaptable to suit different sports.

2. If measures of decision styles and coaching behavior are to be correlated with coaching effectiveness, a prior examination of what coaching effectiveness *is* is necessary. Consequently a valid and reliable instrument to measure coaching effectiveness (athlete satisfaction) must be constructed.

3. A thorough examination of discrepancy scores must be a priority. At present there are serious limitations in both the assumptions on dyadic data and with the calculation and interpretation of curvilinear relationships, for exact replication to be advised in future studies.

4. If self-report measures are the only means of acquiring data the limitations and dangers inherent in this methodology must not only be addressed and indentified, they must somehow be controlled.

5. Locus of control measures would be an interesting addition to the data collected on coaches, which could be related to both preferred decision styles and the competitive level of coaching attained.

6. Regardless of what methodologies are decided on for future studies, the sports chosen should represent all different sport types - i.e. independent sports, proactive and reactive dependent, coactive dependent and interactive dependent sports. Also included in the sample should be male and female athletes from different age groups and competitive levels.

7. Finally, although Chelladurai and his associates have made significant in-roads to the study of coaching behavior, decision styles and coaching effectiveness, and support is available in this study for almost all of the hypotheses generated from both the decision-making and behavior models, the picture of what 'good coaches do' is still not crystal clear. It would be significantly better therefore, to follow all of the above recommendations prior to replicating this study and *then* combine the same methodology with other more subjective techniques that can detect and measure decision making, coaching behavior and coaching effectiveness more accurately. The additional techniques that are recommended

include *audio-visual video taping* of actual coaching (practise *and* competition activity), *interviews* to ascertain how behavior and communication is received and interpreted, and *ethnography* to document patterns of leadership in sport groups over an extended period of time.

Using all of the above techniques together will undoubtedly enhance our understanding of most, if not all, of the variables at work in the symphony of behaviors involved in sport leadership. It is clear that a thorough comprehension and familiarity with all of these variables, and their inter-relationship with each other, is necessary before further scholarly attempts to prepare the foundations of a general theory of sport leadership can be made.

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APPENDIX A: COACH INFORMATION SHEET

Coach Name:

University Address:

Date of Birth:

Country of Birth:

Current Citizenship:

Coaching Experience:

1. Intercollegiate level

2. Other levels

1982-1983 CIAU Won-Loss Record:

APPENDIX B: DECISION STYLES INVENTORY - COACH

Decision Styles in Soccer Coaching

Soccer coaches are frequently involved in making decisions and it is generally accepted that decision making is one of the coach's most important functions. The different strategies coaches might use, depending on each coaching problem or situation, are referred to as decision styles and there are basically four different types which are described below:

1. autocratic style - decisions are made entirely by the coach himself, without consulting anyone else
2. consultative style - decisions are made by the coach but after consulting with one or more of the players on his team (consultation with assistant coaches is not included in this or any other decision style)
3. participative style - decisions are made by the group including the coach. The position of coach here is that of another team member.
4. delegative style - decisions are made by a team member or group of players delegated by the coach to take the responsibilities of that decision on behalf of the whole team

In the following pages fifteen soccer situations are described and your task, as a head coach, is to indicate the decision style you would use given the information presented in each case.

Specifically you are asked to:

1. indicate which style you would use (tick)
2. and, indicate also the style you think other C.I.A.U. coaches would normally use in the same situation. If this response is similar to yours write 'SAME'.

N.B.: 1. 'Consultation' refers to consulting players not assistant coaches (as does 'participation' and 'delegation').

2. Choose the decision style based only upon the information given in each case. Do not assume any other information is available - it isn't!

3. Respond to each case and be assured there are no right or wrong answers.

4. Do not spend too long on any particular case.

Decision Styles in Soccer Coaching

Date: _____

Name: _____ Team: _____

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE ONE

Early in the second half of an important game a key mid-field player gets injured. The players on the bench have been with you for a few seasons so you know them and their capabilities very well. You have to choose between them to substitute for the injured player who is unable to continue.
How is this decision made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE TWO

One of your most reliable and dependable senior players reports ill in the changing room just prior to the kick off of an important game. A decision has to be made whether or not he should play.

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE THREE

You are a new coach to an experienced team which faces stiff competition in a week's time. Following an injury to two of the team's key players you have to select replacements and decide on team tactics for this particular game. The team captain and other experienced players played in the previous fixture with the same opposition earlier in the season, when you were not around.
How are these decisions made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE FOUR

Team practice times have to be set for the coming season. Your players have different daily schedules from each other as do your trainer and manager.
How is this decision made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE FIVE

You have been with the team for a number of seasons and decide that your players and the coaching staff must discuss team discipline on and off the field of play.
How are decisions made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE SIX

As a new coach to the team in pre-season, you decide to discuss travelling dress codes with your players who have been together for a number of seasons and get along well with each other.
How is this decision made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE SEVEN

As the team's newly appointed coach, and unfamiliar with the opposition's players' tactics or home field conditions (dimensions of the field, surface, etc.) you need to decide on a style of play that best suits your players. The team captain and one or two other players have played at this ground and know the opposition well.
How is this decision made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE EIGHT

In preparation for the next game you have to decide a week in advance which practices and drills are most relevant for your players. You personally know the strengths and weaknesses of the opposition and your own players' capabilities.
How do you decide on your practice content and the tactics you will use with your players in this game?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE NINE

You have a two week break in the league schedule. Adequately aware of your team's weaknesses you wish to arrange practice drills and schedules that should improve skill levels all round. How do you make this decision?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE TEN

The team is enjoying a string of wins with new lesser experienced players who had successfully replaced some key injured players four games previously. You are due to play your arch rivals in a week's time and all the experienced players suddenly report fit to play. Team selection for this game is your dilemma because you know full well the capabilities of all your players and the intense atmosphere in which this game will be played.
How do you make your decision prior to preparation for this important game?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE ELEVEN

You are a newly appointed coach to a well established group of players on a team noted for it's warm and friendly atmosphere. You wish to arrange a pre-season tour with good competition in a vicinity familiar to both your players and yourself. There is ample choice from amongst different opponents of similar ability.
How would you decide on your tour venues and opponents?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE TWELVE

You are a newly appointed coach to an experienced, skillful but unhappy group of players. Prior to the season you want to establish whether or not your defenders will play an offside trap. You know they are easily capable of establishing this tactic in their play but unfortunately none of the defenders including the goalkeeper get along well with each other. The team captain and sweeper seems to have most influence on the squad.
How is this decision made?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE THIRTEEN

Your experienced and very dependable starting goalkeeper complains of a painful back ache early in the training week. You have serious doubts as to whether he will be able to play in the next game which is an important fixture for your team. Your decision involves training this goalkeeper or letting him rest hoping either way that he will be able to play in the game; or, assuming from his complaints that he won't be fit enough to play, using the far less competent back-up goalkeeper right away in team practice.
Which decision style would you use in this situation?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

CASE FOURTEEN

You have not personally been on the next series of important road games away from home and you know that your players must be adequately prepared for the physical demands unique to this playing schedule. Your players are experienced and have been on this trip before and get along well together.
How do you make this decision regarding suitable training schedules in lieu of this trip?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE FIFTEEN

Your team has been invited to a particular tournament during a two week break in the league schedule. You are acquainted with the tournament and most anxious that the experience should be beneficial to the team and the team's goals. The team captain has attended and played in the same tournament before and has most influence over players whose agreement over this matter would seem to be crucial if the experience is to be at all beneficial. Unfortunately there is a great deal of conflict and hostility amongst some of the playes.
How do you decide whether or not to go to the tournament?

	autocratic	consultative	participative	delegative
As head coach which decision style would you choose?	___	___	___	___
Which style would other C.I.A.U. coaches normally use?	___	___	___	___

APPENDIX C: DECISION STYLES INVENTORY - ATHLETES

Decision Styles in Soccer Coaching

Soccer coaches are frequently involved in making decisions and it is generally accepted that decision making is one of the coach's most important functions. The different strategies coaches might use, depending on each coaching problem or situation, are referred to as decision styles and there are basically four different types which are described below:

1. autocratic style - decisions are made entirely by the coach himself, without consulting anyone else
2. consultative style - decisions are made by the coach but after consulting with one or more of the players on his team (consultation with assistant coaches is not included in this or any other decision style)
3. participative style - decisions are made by the group including the coach. The position of coach here is that of another team member.
4. delegative style - decisions are made by a team member or group of players delegated by the coach to take the responsibilities of that decision on behalf of the whole team

In the following pages fifteen soccer situations are described and your task, as a player, is to indicate the decision style you would prefer your coach to use given the information presented in each case.

Specifically you are asked to:

1. tick the style you would prefer your coach to use
2. and, tick also the style you think your coach would use if this decision actually had to be made. Write 'SAME' if these responses are similar.

N.B.: 1. 'Consultation' refers to consulting players not assistant coaches (as does 'participation' and 'delegation').

2. Choose the decision style based only upon the information given in each case. Do not assume any other information is available - it isn't!

3. Respond to each case and be assured there are no right or wrong answers.

4. Do not spend too long on any particular case.

Decision Styles in Soccer Coaching

Date: _____

Name: _____ Team: _____

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE ONE

Early in the second half of an important game a key mid-field player gets injured. The players on the bench have been with you for a few seasons so you know them and their capabilities very well. You have to choose between them to substitute for the injured player who is unable to continue.
How is this decision made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE TWO

One of your most reliable and dependable senior players reports ill in the changing room just prior to the kick off of an important game. A decision has to be made whether or not he should play.
How is this decision made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE THREE

You are a new coach to an experienced team which faces stiff competition in a week's time. Following an injury to two of the team's key players you have to select replacements and decide on team tactics for this particular game. The team captain and other experienced players played in the previous fixture with the same opposition earlier in the season, when you were not around.
How are these decisions made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE FOUR

Team practice times have to be set for the coming season. Your players have different daily schedules from each other as do your trainer and manager.
How is this decision made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE FIVE

You have been with the team for a number of seasons and decide that your players and the coaching staff must discuss team discipline on and off the field of play.
How are decisions made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE SIX

As a new coach to the team in pre-season, you decide to discuss travelling dress codes with your players who have been together for a number of seasons and get along well with each other.
How is this decision made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE SEVEN

As the team's newly appointed coach, and unfamiliar with the opposition's players' tactics or home field conditions (dimensions of the field, surface, etc.) you need to decide on a style of play that best suits your players. The team captain and one or two other players have played at this ground and know the opposition well.
How is this decision made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE EIGHT

In preparation for the next game you have to decide a week in advance which practices and drills are most relevant for your players. You personally know the strengths and weaknesses of the opposition and your own players' capabilities.
How do you decide on your practice content and the tactics you will use with your players in this game?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE NINE

You have a two week break in the league schedule. Adequately aware of your team's weaknesses you wish to arrange practice drills and schedules that should improve skill levels all round. How do you make this decision?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE TEN

The team is enjoying a string of wins with new lesser experienced players who had successfully replaced some key injured players four games previously. You are due to play your arch rivals in a week's time and all the experienced players suddenly report fit to play. Team selection for this game is your dilemma because you know full well the capabilities of all your players and the intense atmosphere in which this game will be played.
How do you make your decision prior to preparation for this important game?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE ELEVEN

You are a newly appointed coach to a well established group of players on a team noted for it's warm and friendly atmosphere. You wish to arrange a pre-season tour with good competition in a vicinity familiar to both your players and yourself. There is ample choice from amongst different opponents of similar ability.
How would you decide on your tour venues and opponents?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE TWELVE

You are a newly appointed coach to an experienced, skillful but unhappy group of players. Prior to the season you want to establish whether or not your defenders will play an offside trap. You know they are easily capable of establishing this tactic in their play but unfortunately none of the defenders including the goalkeeper get along well with each other. The team captain and sweeper seems to have most influence on the squad.
How is this decision made?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE THIRTEEN

Your experienced and very dependable starting goalkeeper complains of a painful back ache early in the training week. You have serious doubts as to whether he will be able to play in the next game which is an important fixture for your team. Your decision involves training this goalkeeper or letting him rest hoping either way that he will be able to play in the game; or, assuming from his complaints that he won't be fit enough to play, using the far less competent back-up goalkeeper right away in team practice.
Which decision style would you use in this situation?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

CASE FOURTEEN

You have not personally been on the next series of important road games away from home and you know that your players must be adequately prepared for the physical demands unique to this playing schedule. Your players are experienced and have been on this trip before and get along well together.
How do you make this decision regarding suitable training schedules in lieu of this trip?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

Reminder: autocratic style = coach by himself

consultative style = coach and consultation with player(s)

participative style = coach together with player(s)

delegative style = coach delegates decision making to player(s)

CASE FIFTEEN

Your team has been invited to a particular tournament during a two week break in the league schedule. You are acquainted with the tournament and most anxious that the experience should be beneficial to the team and the team's goals. The team captain has attended and played in the same tournament before and has most influence over players whose agreement over this matter would seem to be crucial if the experience is to be at all beneficial. Unfortunately there is a great deal of conflict and hostility amongst some of the playes.
How do you decide whether or not to go to the tournament?

	autocratic	consultative	participative	delegative
As a C.I.A.U. soccer player which decision style would you prefer your coach to use?	___	___	___	___
Which style do you think your present coach would use?	___	___	___	___

APPENDIX D: LSS - COACH

TEAM: _____ NAME: _____

Leadership Scale For Sports

(Coach's Perception of his own behaviour)

Each of the following statements describe a specific behavior that a coach may exhibit. For each statement there are five alternatives:

5. ALWAYS; 4. OFTEN (about 75% of the time); 3. OCCASIONALLY (50% of the time);

2. SELDOM (about 25% of the time); 1. NEVER.

You are requested to indicate your characteristic behavior by marking an "X" in the appropriate space. There are no right or wrong answers. Your spontaneous and honest response is important for the success of this project.

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	In coaching, I	5 4 3 2 1
1.	See to it that athletes work to capacity.	_ _ _ _ _ 1
2.	Ask for the opinion of the athletes on strategies for specific competitions.	_ _ _ _ _ 2
3.	Help athletes with their personal problems.	_ _ _ _ _ 3
4.	Compliment an athlete for good performance in front of others.	_ _ _ _ _ 4
5.	Explain to each athlete the techniques and tactics of the sport.	_ _ _ _ _ 5
6.	Plan relatively independent of the athletes.	_ _ _ _ _ 6
7.	Help members of the group settle their conflicts.	_ _ _ _ _ 7
8.	Pay special attention to correcting athletes' mistakes.	_ _ _ _ _ 8
9.	Get group approval on important matters before going ahead.	_ _ _ _ _ 9
10.	Tell an athlete when the athlete does a particularly good job.	_ _ _ _ _ 10
11.	Make sure that the coach's function in the team is understood by all athletes.	_ _ _ _ _ 11
12.	Do not explain my actions.	_ _ _ _ _ 12
13.	Look out for the personal welfare of the athletes.	_ _ _ _ _ 13

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	In coaching, I	5	4	3	2	1	
14.	Instruct every athlete individually in the skills of the sport.	_	_	_	_	_	14
15.	Let the athletes share in decision making.	_	_	_	_	_	15
16.	See that an athlete is rewarded for a good performance.	_	_	_	_	_	16
17.	Figure ahead on what should be done.	_	_	_	_	_	17
18.	Encourage athletes to make suggestions for ways to conduct practices.	_	_	_	_	_	18
19.	Do personal favors for the athletes.	_	_	_	_	_	19
20.	Explain to every athlete what should be done and what should not be done.	_	_	_	_	_	20
21.	Let the athletes set their own goals.	_	_	_	_	_	21
22.	Express any affection felt for the athletes.	_	_	_	_	_	22
23.	Expect every athlete to carry out one's assignment to the last detail.	_	_	_	_	_	23
24.	Let the athletes try their own way even if they make mistakes.	_	_	_	_	_	24
25.	Encourage the athlete to confide in me.	_	_	_	_	_	25
26.	Point out each athlete's strengths and weaknesses.	_	_	_	_	_	26
27.	Refuse to compromise on a point.	_	_	_	_	_	27
28.	Express appreciation when an athlete performs well.	_	_	_	_	_	28
29.	Give specific instructions to each athlete on what should be done in every situation.	_	_	_	_	_	29
30.	Ask for the opinion of the athletes on important coaching matters.	_	_	_	_	_	30
31.	Encourage close & informal relations with athletes.	_	_	_	_	_	31
32.	See to it that the athletes' efforts are co-ordinated.	_	_	_	_	_	32
33.	Let the athletes work at their own speed.	_	_	_	_	_	33
34.	Keep aloof from the athletes.	_	_	_	_	_	34
35.	Explain how each athlete's contribution fits into the total picture.	_	_	_	_	_	35

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	In coaching, I	5	4	3	2	1	
36.	Invite the athletes home.	_	_	_	_	_	36
37.	Give credit when it is due.	_	_	_	_	_	37
38.	Specify in detail what is expected of athletes.	_	_	_	_	_	38
39.	Let the athletes decide on plays to be used in a game.	_	_	_	_	_	39
40.	Speak in a manner which discourages questions.	_	_	_	_	_	40

APPENDIX E: LSS - ATHLETE PREFERENCES

TEAM: _____ NAME: _____

Leadership Scale For Sports (Preference Version)

Each of the following statements describe a specific behavior that a coach may exhibit. For each statement there are five alternatives:

5. ALWAYS; 4. OFTEN (about 75% of the time); 3. OCCASIONALLY (50% of the time);

2. SELDOM (about 25% of the time); 1. NEVER.

Please indicate your preference by placing an "X" in the appropriate space. Answer all items even if you are unsure of any. Please note that this is not an evaluation of your present coach or any other coach. It is your own personal preference that is required. There are no right or wrong answers. Your spontaneous and honest response is important for the success of the study.

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	I prefer my coach to:	5	4	3	2	1	
1.	See to it that athletes work to capacity.	_	_	_	_	_	1
2.	Ask for the opinion of the athletes on strategies for specific competitions.	_	_	_	_	_	2
3.	Help athletes with their personal problems.	_	_	_	_	_	3
4.	Compliment an athlete for good performance in front of others.	_	_	_	_	_	4
5.	Explain to each athlete the techniques and tactics of the sport.	_	_	_	_	_	5
6.	Plan relatively independent of the athletes.	_	_	_	_	_	6
7.	Help members of the group settle their conflicts	_	_	_	_	_	7
8.	Pay special attention to correcting athletes' mistakes.	_	_	_	_	_	8
9.	Get group approval on important matters before going ahead.	_	_	_	_	_	9
10.	Tell an athlete when the athlete does a particularly good job.	_	_	_	_	_	10
11.	Make sure that the coach's function in the team is understood by all athletes.	_	_	_	_	_	11
12.	Not explain his actions.	_	_	_	_	_	12
13.	Look out for the personal welfare of the athletes.	_	_	_	_	_	13

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	I prefer my coach to:	5 4 3 2 1	
14.	Instruct every athlete individually in the skills of the sport.	_ _ _ _ _	14
15.	Let the athletes share in decision making.	_ _ _ _ _	15
16.	See that an athlete is rewarded for a good performance.	_ _ _ _ _	16
17.	Figure ahead on what should be done.	_ _ _ _ _	17
18.	Encourage athletes to make suggestions for ways to conduct practices.	_ _ _ _ _	18
19.	Do personal favors for the athletes.	_ _ _ _ _	19
20.	Explain to every athlete what should be done and what should not be done.	_ _ _ _ _	20
21.	Let the athletes set their own goals.	_ _ _ _ _	21
22.	Express any affection felt for the athletes.	_ _ _ _ _	22
23.	Expect every athlete to carry out one's assignment to the last detail.	_ _ _ _ _	23
24.	Let the athletes try their own way even if they make mistakes.	_ _ _ _ _	24
25.	Encourage the athlete to confide in the coach.	_ _ _ _ _	25
26.	Point out each athlete's strengths and weaknesses.	_ _ _ _ _	26
27.	Refuse to compromise on a point.	_ _ _ _ _	27
28.	Express appreciation when an athlete performs well.	_ _ _ _ _	28
29.	Give specific instructions to each athlete on what should be done in every situation.	_ _ _ _ _	29
30.	Ask for the opinion of the athletes on important coaching matters.	_ _ _ _ _	30
31.	Encourage close & informal relations with athletes.	_ _ _ _ _	31
32.	See to it that the athletes' efforts are co-ordinated.	_ _ _ _ _	32
33.	Let the athletes work at their own speed.	_ _ _ _ _	33
34.	Keep aloof from the athletes.	_ _ _ _ _	34
35.	Explain how each athlete's contribution fits into the total picture.	_ _ _ _ _	35

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	I prefer my coach to:	5	4	3	2	1	
36.	Invite the athletes home.	_	_	_	_	_	36
37.	Give credit when it is due.	_	_	_	_	_	37
38.	Specify in detail what is expected of athletes.	_	_	_	_	_	38
39.	Let the athletes decide on plays to be used in a game.	_	_	_	_	_	39
40.	Speak in a manner which discourages questions.	_	_	_	_	_	40

APPENDIX F: LSS - ATHLETE PERCEPTIONS

TEAM: _____ NAME: _____

Leadership Scale For Sports

(Athlete's perception of coach's behaviour)

Each of the following statements describe a specific behavior that a coach may exhibit. For each statement there are five alternatives:
5. ALWAYS; 4. OFTEN (about 75% of the time); 3. OCCASIONALLY (50% of the time);
2. SELDOM (about 25% of the time); 1. NEVER

Please indicate your coach's actual behavior by placing an "X" in the appropriate space. Answer all items even if you are unsure of any . Please note that you are rating your present coach.

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	My coach:	5	4	3	2	1	
1.	Sees to it that athletes work to capacity.	_	_	_	_	_	1
2.	Asks for the opinion of the athletes on strategies for specific competitions.	_	_	_	_	_	2
3.	Helps athletes with their personal problems.	_	_	_	_	_	3
4.	Compliments an athlete for good performance in front of others.	_	_	_	_	_	4
5.	Explains to each athlete the techniques and tactics of the sport.	_	_	_	_	_	5
6.	Plans relatively independent of the athletes.	_	_	_	_	_	6
7.	Helps members of the group settle their conflicts	_	_	_	_	_	7
8.	Pays special attention to correcting athletes' mistakes.	_	_	_	_	_	8
9.	Gets group approval on important matters before going ahead.	_	_	_	_	_	9
10.	Tells an athlete when the athlete does a particularly good job.	_	_	_	_	_	10
11.	Makes sure that the coach's function in the team is understood by all athletes.	_	_	_	_	_	11
12.	Does not explain his actions.	_	_	_	_	_	12
13.	Looks out for the personal welfare of the athletes.	_	_	_	_	_	13

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	My coach:	5	4	3	2	1	
14.	Instructs every athlete individually in the skills of the sport.	_	_	_	_	_	14
15.	Lets the athletes share in decision making.	_	_	_	_	_	15
16.	Sees that an athlete is rewarded for a good performance.	_	_	_	_	_	16
17.	Figures ahead on what should be done.	_	_	_	_	_	17
18.	Encourages athletes to make suggestions for ways to conduct practices.	_	_	_	_	_	18
19.	Does personal favors for the athletes.	_	_	_	_	_	19
20.	Explains to every athlete what should be done and what should not be done.	_	_	_	_	_	20
21.	Lets the athletes set their own goals.	_	_	_	_	_	21
22.	Expresses any affection felt for the athletes.	_	_	_	_	_	22
23.	Expects every athlete to carry out one's assignment to the last detail.	_	_	_	_	_	23
24.	Lets the athletes try their own way even if they make mistakes.	_	_	_	_	_	24
25.	Encourages the athlete to confide in the coach.	_	_	_	_	_	25
26.	Points out each athlete's strengths and weaknesses.	_	_	_	_	_	26
27.	Refuses to compromise on a point.	_	_	_	_	_	27
28.	Expresses appreciation when an athlete performs well.	_	_	_	_	_	28
29.	Gives specific instructions to each athlete on what should be done in every situation.	_	_	_	_	_	29
30.	Asks for the opinion of the athletes on important coaching matters.	_	_	_	_	_	30
31.	Encourages close & informal relations with athletes.	_	_	_	_	_	31
32.	Sees to it that the athletes' efforts are co-ordinated.	_	_	_	_	_	32
33.	Lets the athletes work at their own speed.	_	_	_	_	_	33
34.	Keeps aloof from the athletes.	_	_	_	_	_	34
35.	Explains how each athlete's contribution fits into the total picture.	_	_	_	_	_	35

5. ALWAYS 4. OFTEN 3. OCCASIONALLY 2. SELDOM 1. NEVER

	My coach:	5	4	3	2	1	
36.	Invites the athletes home.	_	_	_	_	_	36
37.	Gives credit when it is due.	_	_	_	_	_	37
38.	Specifies in detail what is expected of athletes.	_	_	_	_	_	38
39.	Lets the athletes decide on plays to be used in a game.	_	_	_	_	_	39
40.	Speaks in a manner which discourages questions.	_	_	_	_	_	40

APPENDIX G: POI - PERSONAL OPINION INVENTORY

Player's Personal Opinion Inventory

Name: _____ Team: _____ Date: ____

Please circle your most appropriate response to each question in the spaces provided. Please respond to each question.

How satisfied were you with:	Very Dissatisfied				Very Satisfied
1. your own personal over-all performance this year?	1	2	3	4	5
2. the over-all performance of your team this year?	1	2	3	4	5
3. the individual skill instruction that you were given by your coach this year?	1	2	3	4	5
4. the skill instruction that your team as a whole was given by your coach this year?	1	2	3	4	5
5. your coach's knowledge of the game?	1	2	3	4	5
6. your coach's ability to coach and his technical expertise?	1	2	3	4	5
7. your coach's preparation and organization?	1	2	3	4	5
8. your coach's motivational abilities?	1	2	3	4	5
9. your coach's squad selection and team selection?	1	2	3	4	5
10. the interpersonal relationship that you had with the coach?	1	2	3	4	5
11. the coach's interpersonal relationship with the team as a whole?	1	2	3	4	5
12. the coach's effectiveness as a coach?	1	2	3	4	5
13. the commitment you felt towards this team?	1	2	3	4	5
14. your level of competitiveness on this team this year?	1	2	3	4	5
15. your personal membership on this team this year?	1	2	3	4	5
16. the amount of input you had in decisions that affected the team?	1	2	3	4	5
17. the responsibilities you had on this team as a team member?	1	2	3	4	5
18. your opportunities to exert leadership and influence on this team?	1	2	3	4	5
19. your assigned role and how your role fitted into the team this year?	1	2	3	4	5

• • • • • • • • •

	Strongly Disagree	Disagree A Little		Agree A Little	Strongly Agree
20. I understood my offensive tactical responsibilities on this team.	1	2	3	4	5
21. I understood my defensive tactical responsibilities in the team this year.	1	2	3	4	5
22. I was certain of what was expected of me during games this year.	1	2	3	4	5
23. I received consistent and clear advice from my coach.	1	2	3	4	5
24. I understood the game responsibilities I received from my coach.	1	2	3	4	5
25. I was told regularly how I was to do my job.	1	2	3	4	5
26. I could get answers from my coach if I was unsure what to do.	1	2	3	4	5
27. I knew if my play was acceptable to the coach.	1	2	3	4	5
28. I understood what was expected of me generally as a team member.	1	2	3	4	5
29. I accepted (was satisfied with) my offensive responsibilities on this team.	1	2	3	4	5
30. I accepted my defensive responsibilities on this team.	1	2	3	4	5
31. I accepted the game responsibilities given to me by my coach.	1	2	3	4	5
32. I accept that my talents were put to good use on this team.	1	2	3	4	5
33. I was satisfied with my coach's expectations of me.	1	2	3	4	5
34. I was satisfied with all of my game responsibilities.	1	2	3	4	5

• • • • • • • • •

	Much Lower	Below	As Expected	Above	Much Higher
35. What is your assessment of your performance in relation to what you had expected to achieve this year?	1	2	3	4	5
36. What is your assessment of the team's performance in relation to what you had expected this year?	1	2	3	4	5
37. What is your assessment of the coach's effectiveness as a coach in relation to what you had expected this year?	1	2	3	4	5

APPENDIX H: POI - ITEM ANALYSIS

CORRELATION MATRIX

N= 159 DF= 157 R= .0500= .1557 R= .0100= .2037

VARIABLE											
3. I1	1.0000										
4. I2	.2903	1.0000									
5. I3	.1772	.3360	1.0000								
6. I4	.0681	.3520	.7009	1.0000							
7. I5	.0802	.2082	.3787	.4703	1.0000						
8. I6	.0864	.3163	.4953	.5586	.6161	1.0000					
9. I7	.1209	.2565	.4789	.5082	.3664	.4635	1.0000				
10. I8	.1636	.3508	.3379	.3990	.2377	.4687	.5538	1.0000			
11. I9	.0294	.2619	.2402	.3173	.2760	.3533	.3026	.4235	1.0000		
12. I10	.1569	.1662	.1736	.2436	.3313	.2668	.1439	.2118	.3914	1.0000	
13. I11	.0703	.2379	.1695	.3217	.3201	.3971	.2060	.3692	.3865	.6346	1.0000
14. I12	.0930	.4503	.5025	.6067	.5223	.7401	.5243	.6197	.4630	.3952	.5277
15. I13	.1721	.1929	.3805	.3961	.3606	.3623	.3901	.3278	.2651	.2348	.1931
16. I14	.3575	.2517	.3210	.3711	.3264	.2933	.3907	.2635	.1906	.1810	.1129
17. I15	.4649	.2270	.3423	.2881	.2546	.2322	.2917	.2583	.2572	.2523	.1790
18. I16	.2459	.1533	.3208	.2999	.1845	.1011	.2133	.2235	.3933	.4128	.3287
19. I17	.3225	.2143	.3804	.3135	.2623	.2615	.3016	.2502	.4020	.2112	.2526
20. I18	.1840	.1115	.1938	.2781	.1786	.1338	.1571	.0915	.3545	.2613	.1660
21. I19	.3933	.1835	.2571	.3079	.1802	.2130	.3354	.3096	.2845	.1058	.1572
22. I20	.0866	.2370	.2566	.3118	.1399	.1844	.3379	.1421	.1916	.1969	.0906
	3. I1	4. I2	5. I3	6. I4	7. I5	8. I6	9. I7	10. I8	11. I9	12. I10	13. I11	14. I12

23.I21	.1505	.1019	.1648	.1997	.1906	.2251	.3072	.1442	.1813	.1298	.0875	.2252
24.I22	.2435	.2409	.2418	.2090	.1433	.2023	.2744	.2567	.2916	.2633	.1903	.2476
25.I23	.2231	.2929	.5125	.4100	.3351	.4307	.4112	.2967	.2737	.3003	.2473	.4321
26.I24	.1927	.2887	.4375	.4721	.2794	.3676	.5227	.3548	.2630	.1663	.1781	.4851
27.I25	.1140	.2715	.4257	.3436	.1513	.2183	.2843	.2356	.1279	.0877	.0614	.3271
28.I26	.0908	.2345	.3021	.4007	.5334	.4406	.2789	.3782	.3331	.4640	.4954	.5725
29.I27	.1351	.2193	.3134	.2192	.2313	.3656	.2571	.2615	.1942	.3174	.2855	.3223
30.I28	.0781	.0870	.2887	.2441	.1660	.2448	.2761	.2772	.2282	.1708	.1742	.3113
31.I29	.3068	.2916	.2749	.3532	.1514	.1478	.2558	.1021	.1916	.2567	.1106	.2245
32.I30	.2491	.1521	.0958	.1313	.1283	.1500	.1639	.1034	.2140	.2432	.1469	.1649
33.I31	.1697	.2980	.2734	.2041	.1801	.2292	.3419	.2668	.3918	.2689	.2575	.3071
34.I32	.3272	.2311	.3246	.2653	.2083	.2292	.3877	.2727	.3584	.2391	.0981	.3066
35.I33	.4051	.1518	.3506	.3215	.3199	.3513	.3083	.2218	.2297	.3064	.2285	.3611
36.I34	.3627	.2509	.2966	.2828	.2445	.2257	.3470	.2403	.2429	.2743	.2510	.3137
37.I35	.7239	.3235	.1776	.1337	.0465	.0467	.2424	.1895	.1018	.1398	.1151	.1093
38.I36	.2183	.7113	.1801	.2448	.1031	.2741	.0842	.1893	.2084	.0916	.1780	.2730
39.I37	.0721	.4288	.3246	.4165	.2787	.4092	.2915	.3554	.2462	.1659	.3207	.4724
	3. I1	4. I2	5. I3	6. I4	7. I5	8. I6	9. I7	10. I8	11. I9	12. I10	13. I11	14. I12

40.PERPERF	.9230	.3312	.1911	.1099	.0676	.0709	.1980	.1906	.0720	.1594	.1007	.1093
41.TEAMPERF	.2738	.9204	.2765	.3209	.1666	.3184	.1814	.2894	.2534	.1381	.2238	.3881
42.COACHEX	.1427	.4665	.7030	.7803	.6340	.7989	.7132	.7080	.5705	.3609	.4728	.8571
43.SOCIAL	.1249	.2241	.1897	.3133	.3602	.3683	.1941	.3228	.4302	.9008	.9073	.5116
44.ROLECLAR	.2118	.3222	.4769	.4523	.3474	.4302	.4718	.3759	.3314	.3360	.2891	.5154
45.ROLEACC	.4076	.3021	.3624	.3496	.2746	.2959	.4011	.2671	.3572	.3495	.2360	.3722
46.TEAMINV	.4316	.2671	.4350	.4509	.3473	.3173	.4157	.3424	.4287	.3283	.2744	.4417
47.MPERPERF	.9230	.3312	.1911	.1099	.0676	.0709	.1980	.1906	.0720	.1594	.1007	.1093
48.MTEAMPER	.2738	.9204	.2765	.3209	.1666	.3184	.1814	.2894	.2534	.1381	.2238	.3881
49.MCOACHEX	.1427	.4665	.7030	.7803	.6340	.7989	.7132	.7080	.5705	.3609	.4728	.8571
50.MSOCIAL	.1249	.2241	.1897	.3133	.3602	.3683	.1941	.3228	.4302	.9008	.9073	.5116
51.MROLECLR	.2118	.3222	.4769	.4523	.3474	.4302	.4718	.3759	.3314	.3360	.2891	.5154
52.MROLEACC	.4076	.3021	.3624	.3496	.2746	.2959	.4011	.2671	.3572	.3495	.2360	.3722
53.MTEAMINV	.4316	.2671	.4350	.4509	.3473	.3173	.4157	.3424	.4287	.3283	.2744	.4417
54.MEANSAT	.4284	.5072	.5951	.6171	.4856	.5715	.5928	.5327	.5170	.4679	.4486	.6839
	3. I1	4. I2	5. I3	6. I4	7. I5	8. I6	9. I7	10. I8	11 I9	12 I10	13. I11	14. I12

15. I13	1.0000											
16. I14	.5344	1.0000										
17. I15	.4675	.5471	1.0000									
18. I16	.1637	.2899	.3538	1.0000								
19. I17	.2976	.4423	.4938	.5719	1.0000							
20. I18	.1329	.3677	.2990	.6074	.5692	1.0000						
21. I19	.1876	.3989	.4177	.4523	.6647	.5671	1.0000					
22. I20	.1349	.2783	.1946	.2817	.3164	.2319	.3594	1.0000				
23. I21	.1072	.2216	.1403	.1443	.3438	.2368	.3646	.5085	1.0000			
24. I22	.2460	.2736	.3097	.2713	.4342	.2773	.3935	.6270	.5625	1.0000		
25. I23	.1955	.1523	.2785	.2701	.3902	.1785	.3476	.4526	.3715	.5804	1.0000	
26. I24	.2867	.3354	.2604	.2455	.3809	.2424	.3823	.5862	.5393	.5885	.6621	1.0000
27. I25	.1789	.2238	.1614	.2546	.3436	.1710	.2938	.3410	.2746	.3669	.5180	.5008
28. I26	.2173	.1786	.1910	.2631	.2280	.1475	.2141	.3130	.2543	.3276	.5129	.4694
29. I27	.0847	.0565	0155	.1624	.1254	.0863	.1429	.1855	.1852	.2652	.4224	.3149
30. I28	.3305	.1842	.3169	.2946	.3434	.1871	.3800	.4329	.4187	.5468	.5208	.5382
31. I29	.2341	.3005	.2725	.2789	.3066	.2631	.3522	.5116	.2813	.3864	.2547	.3573
32. I30	.1375	.1551	.2419	.1301	.2817	.1458	.3675	.3752	.6003	.4613	.2634	.3502
	15. I13	16. I14	17. I15	18. I16	19. I17	20. I18	21. I19	22. I20	23. I21	24. I22	25. I23	26. I24

33.I31	.2173	.1826	.3293	.2484	.4467	.2577	.3937	.4359	.4412	.5088	.4055	.5000
34.I32	.2993	.3830	.4067	.4034	.5667	.4453	.6259	.4758	.3656	.4940	.4284	.4317
35.I33	.2771	.3771	.5026	.4220	.5462	.4142	.6415	.3987	.2566	.4436	.4775	.3797
36.I34	.2007	.3141	.3540	.4398	.4591	.3651	.5730	.4727	.3758	.5106	.4354	.4676
37.I35	.1134	.2995	.3745	.2716	.4210	.2660	.4304	.0951	.1045	.1909	.2149	.1798
38.I36	.0938	.1615	.1639	.1332	.1760	.1705	.1722	.1398	.0927	.2064	.2467	.1707
39.I37	.2437	.1751	.1085	.1872	.2875	.1700	.2131	.1823	.0946	.2280	.3649	.3351
40.PERPERF	.1526	.3527	.4502	.2791	.4022	.2439	.4443	.0980	.1364	.2329	.2357	.2003
41.TEAMPERF	.1534	.2219	.2103	.1545	.2103	.1534	.1921	.2021	.1050	.2412	.2909	.2464
42.COACHEX	.4891	.4206	.3690	.3494	.4366	.2749	.3859	.3202	.2720	.3315	.5443	.5548
43.SOCIAL	.2363	.1619	.2378	.4093	.2569	.2355	.1459	.1581	.1198	.2502	.3024	.1906
44.ROLECLAR	.2809	.3036	.2938	.3497	.4636	.2797	.4567	.7055	.6476	.7723	.8092	.8281
45.ROLEACC	.3060	.3871	.4695	.4327	.5807	.4263	.6587	.5902	.4997	.6151	.5014	.5451
46.TEAMINV	.5401	.7257	.7105	.6913	.8134	.7271	.7542	.3651	.3186	.4433	.3615	.4296
47.MPERPERF	.1526	.3527	.4502	.2791	.4022	.2439	.4443	.0980	.1364	.2329	.2357	.2003
48.MTEAMPER	.1534	.2219	.2103	.1545	.2103	.1534	.1921	.2021	.1050	.2412	.2909	.2464
49.MCOACHEX	.4891	.4206	.3690	.3494	.4366	.2749	.3859	.3202	.2720	.3315	.5443	.5548
50.MSOCIAL	.2363	.1619	.2378	.4093	.2569	.2355	.1459	.1581	.1198	.2502	.3024	.1906
51.MROLECLR	.2809	.3036	.2938	.3497	.4636	.2797	.4567	.7055	.6476	.7723	.8092	.8281
52.MROLEACC	.3060	.3871	.4695	.4327	.5807	.4263	.6597	.5902	.4997	.6151	.5014	.5451
53.MTEAMINV	.5401	.7257	.7105	.6913	.8134	.7271	.7542	.3651	.3186	.4433	.3615	.4296
54.MEANSAT	.4742	.5447	.5576	.5480	.6768	.4953	.6587	.5769	.5033	.6486	.6823	.7010
	15. I13	16. I14	17. I15	18. I16	19. I17	20. I18	21. I19	22. I20	23. I21	24. I22	25. I23	26. I24

27. I25	1.0000											
28. I26	.3285	1.0000										
29. I27	.2304	.3155	1.0000									
30. I28	.2662	.3423	.4305	1.0000								
31. I29	.2831	.2101	.0930	.2535	1.0000							
32. I30	.1684	.2455	.1114	.3035	.3836	1.0000						
33. I31	.2863	.3251	.1903	.4710	.4061	.5431	1.0000					
34. I32	.3845	.2838	.2340	.4354	.4933	.3874	.4713	1.0000				
35. I33	.3136	.3134	.3389	.3871	.4519	.3266	.3388	.6472	1.0000			
36. I34	.3553	.3251	.3058	.3957	.5933	.4660	.4119	.5965	.7152	1.0000		
37. I35	.1381	.0361	.1138	.0560	.2501	.2106	.1605	.3480	.3800	.3713	1.0000	
38. I36	.1426	.1031	.2578	.1030	.1320	.1169	.1867	.1269	.0980	.1220	.3628	1.0000
39. I37	.2874	.3109	.2699	.1708	.0942	.0511	.0817	.2580	.2258	.2575	.2155	.5207
	27. I25	28. I26	29. I27	30. I28	31. I29	32. I30	33. I31	34. I32	35. I33	36. I34	37. I35	38. I36

40. PERPERF	.1362	.0673	.1336	.0718	.2988	.2468	.1777	.3640	.4223	.3954	.9336	.3157
41. TEAMPERF	.2217	.1804	.2585	.1030	.2264	.1449	.2602	.1918	.1342	.1995	.3716	.9295
42. COACHEX	.3794	.5528	.3833	.3498	.2816	.1886	.3608	.4119	.4208	.3850	.2016	.3247
43. SOCIAL	.0823	.5309	.3331	.1908	.2018	.2149	.2910	.1852	.2951	.2903	.1407	.1498
44. ROLECLAR	.6324	.6182	.5420	.7020	.4197	.4529	.5634	.5636	.5297	.5822	.1835	.2378
45. ROLEACC	.4000	.3736	.2839	.4934	.7425	.6622	.6779	.8111	.7845	.8409	.3864	.1703
46. TEAMINV	.3271	.2864	.1352	.4039	.4049	.2945	.4156	.6327	.6418	.5475	.4410	.2169
47. MPERPERF	.1362	.0673	.1336	.0718	.2988	.2468	.1777	.3640	.4223	.3954	.9336	.3157
48. MTEAMPER	.2217	.1804	.2585	.1030	.2264	.1449	.2602	.1918	.1342	.1995	.3716	.9295
49. MCOACHEX	.3794	.5528	.3833	.3498	.2816	.1886	.3608	.4119	.4208	.3850	.2016	.3247
50. MSOCIAL	.0823	.5309	.3331	.1908	.2018	.2149	.2910	.1852	.2951	.2903	.1407	.1498
51. MROLECLR	.6324	.6182	.5420	.7020	.4197	.4529	.5634	.5636	.5297	.5822	.1835	.2378
52. MROLEACC	.4000	.3736	.2839	.4934	.7425	.6622	.6779	.8111	.7845	.8409	.3864	.1703
53. MTEAMINV	.3271	.2864	.1352	.4039	.4049	.2945	.4156	.6327	.6418	.5475	.4410	.2169
54. MEANSAT	.5154	.5697	.4390	.5600	.5503	.4764	.6024	.7025	.6988	.6998	.4455	.3910
	27. I25	28. I26	29. I27	30. I28	31. I29	32. I30	33. I31	34. I32	35. I33	36. I34	37. I35	38. I36

39.I37	1.0000											
40.PERPERF	.1576	1.0000										
41.TEAMPERF	.5147	.3494	1.0000									
42.COACHEX	.5915	.1866	.4254	1.0000								
43.SOCIAL	.2705	.1433	.2009	.4621	1.0000							
44.ROLECLAR	.3644	.2124	.3013	.5925	.3453	1.0000						
45.ROLEACC	.2207	.4271	.2532	.4562	.3228	.6847	1.0000					
46.TEAMINV	.2763	.4701	.2608	.5429	.3329	.4879	.6581	1.0000				
47.MPERPERF	.1576	1.0000	.3494	.1866	.1433	.2124	.4271	.4701	1.0000			
48.MTEAMPER	.5147	.3494	1.0000	.4254	.2009	.3013	.2532	.2608	.3494	1.0000		
49.MCOACHEX	.5915	.1866	.4254	1.0000	.4621	.5925	.4562	.5429	.1866	.4254	1.0000	
50.MSOCIAL	.2705	.1433	.2009	.4621	1.0000	.3453	.3228	.3329	.1433	.2009	.4621	1.0000
51.MROLECLR	.3644	.2124	.3013	.5925	.3453	1.0000	.6847	.4879	.2124	.3013	.5925	.3453
52.MROLEACC	.2207	.4271	.2532	.4562	.3228	.6847	1.0000	.6581	.4271	.2532	.4562	.3228
53.MTEAMINV	.2763	.4701	.2608	.5429	.3329	.4879	.6581	1.0000	.4701	.2608	.5429	.3329
54.MEANSAT	.4847	.4709	.4836	.7990	.5067	.8307	.8269	.7946	.4709	.4836	.7990	.5067
	39. I37	40. PERPERF	41. TEAMPERF	42. COACHEX	43. SOCIAL	44. ROLECLAR	45. ROLEACC	46. TEAMINV	47. MPERPERF	48. MTEAMPER	49. MCOACHEX	50. MSOCIAL

51.MROLECLR	1.0000			
52.MROLEACC	.6847	1.0000		
53.MTEAMINV	.4879	.6581	1.0000	
54.MEANSAT	.8307	.8269	.7946	1.0000
	51. MROLECLR	52. MROLEACC	53. MTEAMINV	54. MEANSAT